



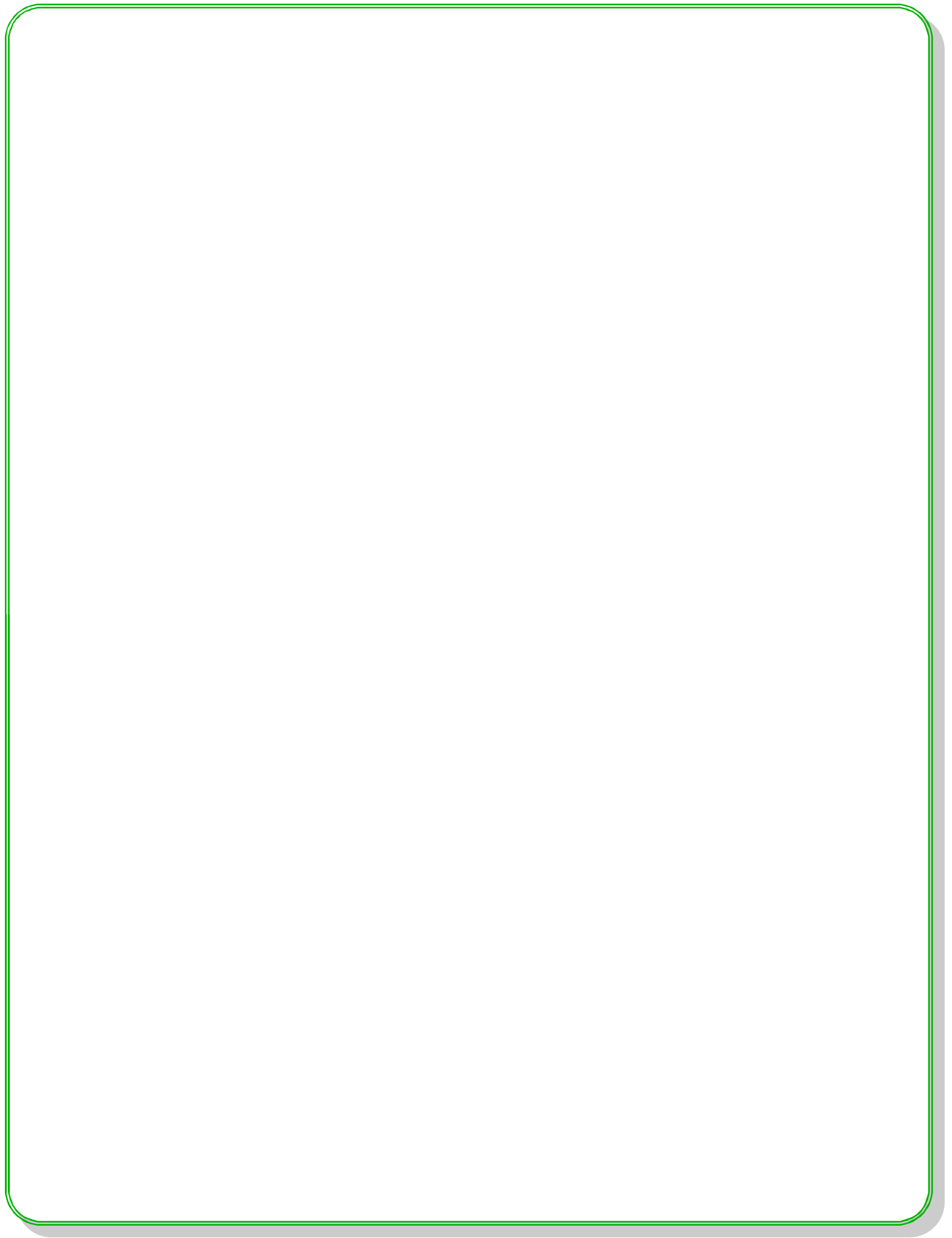
United States
Office of Personnel Management

Architecture Series

GS-0808

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Architecture Series

GS-0808

CONTENTS

SERIES DEFINITION	1
SERIES COVERAGE	1
ORGANIZATION OF THE WORK	3
RELATED OCCUPATIONS	4
TITLES	7
GRADING OF POSITIONS	7
EVALUATION NOTES	8
GRADE CONVERSION TABLE	8
FACTOR LEVEL DESCRIPTIONS	9
FACTOR I, KNOWLEDGE REQUIRED BY THE POSITION	9
FACTOR 2, SUPERVISORY CONTROLS	16
FACTOR 3, GUIDELINES	18
FACTOR 4, COMPLEXITY	20
FACTOR 5, SCOPE AND EFFECT	23
FACTOR 6, PERSONAL CONTACTS	24
FACTOR 7, PURPOSE OF CONTACTS	26
FACTOR 8, PHYSICAL DEMANDS	27
FACTOR 9, WORK ENVIRONMENT	27
OPM BENCHMARK DESCRIPTIONS	28
ARCHITECT GS-0808-09, BMK #1	28
ARCHITECT GS-0808-09, BMK #2	30
ARCHITECT GS-0808-11, BMK #1	32
ARCHITECT GS-0808-11, BMK #2	35
ARCHITECT GS-0808-11, BMK #3	39
ARCHITECT GS-0808-11, BMK #4	41
ARCHITECT GS-0808-12, BMK #1	44
ARCHITECT GS-0808-12, BMK #2	47
ARCHITECT GS-0808-12, BMK #3	49
ARCHITECT GS-0808-13, BMK #1	53
ARCHITECT GS-0808-13, BMK #2	56
ARCHITECT GS-0808-13, BMK #3	59
ARCHITECT GS-0808-13, BMK #4	63
ARCHITECT GS-0808-14, BMK #1	67

SERIES DEFINITION

This series includes positions the duties of which involve professional architectural work which typically requires: (a) knowledge of architectural principles, theories, concepts, methods, and techniques; (b) a creative and artistic sense; and (c) an understanding and skill to use pertinent aspects of the construction industry, engineering and the physical sciences related to the design and construction of new or the improvement of existing buildings.

This standard supersedes the position classification standard for the Architecture Series, GS-808, published in August 1962.

SERIES COVERAGE

Architecture has been defined as the science and art of blending esthetics, function, space, and materials in the design and construction or improvement of buildings and related structures. It is concerned with providing structures which: (1) are responsive to particular human activities and needs, (2) are structurally sound and permanent, (3) have esthetic appeal, i.e., communicate ideas through form, and (4) are economical to acquire and operate.

Architects in the Federal service engage in professional work involving such functions as programming and administration of design and construction, as well as research and the actual design and construction of new, or the improvement of existing, buildings and related structures. Relatively few architects are involved in research whereas most architects play a significant role prior to and during the design and construction of new or the improvement of existing buildings. Architects may also (a) have additional responsibilities concerning work which is characteristic of other professions, e.g., planning for the development of a site or an urban, suburban, or regional area; landscape design and site improvements; and interior design; or (b) perform staff advisory type services in the capacity of a professional consultant or advisor and/or program coordinator-reviewer. They perform professional work in one or a combination of specialties such as:

- Investigating, identifying, and documenting the needs of the client for use in the design of a project;
- Locating proposed sites for the project and evaluating their adequacy with regard to topography, subsurface conditions, utilities, development costs, and other factors;
- Conducting studies to determine the economic viability of a project such as its cost of development versus its potential return to the client;
- Writing or evaluating environmental impact statements;

- Preparing technical portions of design contracts and administering the contracts with architect-engineer firms;
- Establishing a design concept and illustrating the scale and relationship of project components based on a careful study and analysis of project requirements;
- Developing construction documents to portray in more detail the project function, appearance, structure, mechanical and electrical systems, details, materials for the project, and specifications describing material, equipment and workmanship;
- Developing final detailed estimates of construction costs;
- Administering the construction contract which may include periodic visits to the site to review construction or improvement operations involving either contract or agency personnel;
- Reporting on the status of construction or improvement projects;
- Conducting inspections of field operations.

Regardless of the function or specialty thereof, positions in this series are characterized by the required application of professional knowledges and skills to the solution of problems generally concerned with building design and construction or improvement. Such positions typically involve the solution of theoretical or applied problems of such complexity, novelty, or diversity as to require the following for satisfactory performance:

PAGE 3 10/86 TS-77

- Thorough and comprehensive knowledge of the fundamental architectural and structural principles which constitute the common core of knowledge required of positions in this series.
- Familiarity with and skill to comprehend and apply complex theoretical considerations and new developments in the technical literature of architecture and related engineering and scientific disciplines.
- Thorough training in the solution of technical and scientific problems through the application of scientific methodology.
- Mature judgment based on varied and responsible experience in the application of standard practices, techniques, and methods in the building design and construction process.
- General understanding of related fields of work such as civil, structural, electrical, and mechanical engineering, master planning, landscape architecture, and interior design.
- Thorough knowledge of pertinent objectives, policies, and programs of the agency.

Also included in this series are positions, generally at the lower grade levels, involving the performance of technician-type architectural duties when the following factors are present: an actual objective of the work is to prepare the employee for full professional architectural work of a higher level; there is a line of promotion to full professional positions in the organization; assigned duties are of such a nature and variety as to constitute important elements of preparation for full professional architectural work; assigned duties include or require the study of new developments in the technical literature in architecture and related professional fields of work; the employee possesses the qualifications which are consonant with professional development i.e., professional, scientific, or technical training equivalent to that represented by graduation from an accredited college or university; and the supervision exercised over the position is directed in part to the career development of the employee.

ORGANIZATION OF THE WORK

Work in the field of architecture is comprised of such functional areas as planning, design, and construction administration but also includes staff advisory type services which are common to most disciplines. These functions and services may be carried out by an individual, several people, or teams and are typically concerned with the creation of new or the improvement of existing buildings. The functions and services, and work steps under them, are:

PAGE 4 10/86 TS-77

- A. *Planning* -- This function embraces the formulation of plans and policies in connection with a specific architectural project or series of related projects. In many agencies, project planning is dependent upon actions and decisions beyond the control of the architect such as those made by administrators, commissioners, and legislative bodies. In such cases, a broad program is outlined and laid before architects for purposes of refinement, validation, alteration, and specification in detail. In some agencies, especially where design and/or construction is a primary function, architects are instrumental in developing the original long-range projects for consideration by top agency, budgetary, and legislative officials. Project planning is influenced in large measure by such factors as real estate acquisition, fund matching, community support, economics, and other tangible and intangible items. Agencies enforce compliance with projects and policies through the authorization of specific activities such as promulgation of regulatory and procedural instructions, broad contract surveillance, and progress reporting. Architects involved with project planning develop statements of requirements, conduct feasibility studies, and prepare budget estimates.
- B. *Design* -- This function embraces the translation of the client's requirements into design values and terms and the representation of the architect's proposal for satisfying the client's requirements for a building or structure in the form of preliminary drawings, construction drawings, specifications, and cost estimates. In design, esthetic and functional considerations are given the most weight, but structural and mechanical or electrical considerations are also important.

1. Design development consists of two categories -- schematic and preliminary drawings. Agencies frequently let contracts with architect-engineer firms for development of complete designs. In certain work situations, architects work directly with these firms as the Federal Government's representative.
2. Contract Documentation -- consists of construction drawings and specifications.
3. Cost estimates -- consist of the architect's projections of the time and cost of a project. Cost judgments are based on the quantities of materials and labor required, on experience with past projects, and on knowledge of the current building market. Estimates are used to plan and control projects and as guides in evaluating bids. Cost estimates may include estimates which compare the cost of different materials, systems, and designs.

C. *Construction Administration* -- This function embraces those steps leading up to and including contract award, and those relating to construction management and inspection of field operations (construction compliance).

RELATED OCCUPATIONS

The Architecture Series, GS-808, includes positions which are characterized by the required application of professional knowledges and skills to the solution of architectural problems of appropriate character. Such required applications may be based on one or more of the following illustrative conditions of work:

- Architectural problems are of such complexity and so unique that the intensity, advanced nature, and breadth of knowledge required in their solution can be readily demonstrated as requiring professional qualifications beyond the capacity of specialized technicians.
- Assignments require the exercise of initiative, judgment, and resourcefulness to reconcile inadequate and conflicting data to a degree which requires the application of professional knowledge of, and insight into, physical phenomena and relationships in recognizing and defining problems and evaluating methods for their solution. The requirement for application of professional knowledge may also be based on the need for developing new solutions to architectural problems.
- Training assignments where the professional career development aspects of the position justify imposition of the professional requirement.

Work assignments in the following occupations may be closely related to the practice of architecture in the Federal Service:

1. Positions primarily involving professional city, regional, or community planning work that relates to the broad social and economic growth and development of community services and facilities such as industry, commerce, transportation, streets, housing, utilities, and parks are classified in the Community Planning Series, GS-020. However, positions performing such work as an adjunct to or in conjunction with grade or recruitment controlling architectural duties and responsibilities are included in the Architecture Series, GS-808.
 2. Positions primarily concerned with the study and investigation of soils or the interaction of soils and structures. See the Soil Science Series, GS-470, and Civil Engineering Series, GS-810.
 3. Positions involving technical work which requires the application of practical knowledge of architecture or engineering and is subordinate, incident, or related to professional architectural or engineering work are excluded from this series. The functions performed may be similar to those performed by a professional architect, but require the application of a practical knowledge of the methods and techniques of engineering or architecture without a comprehensive knowledge of the theory or sciences upon which the methods and techniques are based. Such positions are classified to the appropriate technical series such as the Engineering Technician Series, GS-802; Construction Control Series, GS-809; Engineering Drafting Series, GS-818; Construction Analysis Series, GS-828; or Exhibits Specialist Series, GS-1010.
- PAGE 7 10/86 TS-77
4. Positions which involve the investigation, testing, and inspection of construction materials are generally excluded from this series unless such duties primarily require architectural knowledges. See the Materials Engineering Series, GS-806, and the Civil Engineering Series, GS-810.
 5. Positions performing professional work to plan and design land areas and concurrent landscape construction and maintenance for integrated developments to meet specific human needs are covered by the Landscape Architect Series, GS-807.
 6. Both architecture and civil engineering are disciplines defined and recognized as professions by academic institutions, industry, and Government. Each discipline includes positions concerned with the design and construction of buildings and related structures. Architect positions and certain types of civil engineer positions may have virtually inseparable duties and inherent knowledges, skills, and abilities. The objectives, functions, activities, and subject matter of such positions may be quite similar if not identical. The duties and responsibilities of such positions and the qualifications required for the work are such that persons with training and experience in either profession may be considered to be equally well qualified for the work. Such a position may be designated as interdisciplinary for recruitment purposes when the problems may be approached by applying the principles and methods of architecture or of civil engineering. For example,

positions which involve the development and writing of specifications, or the estimation of materials and costs for the construction, extension, alteration, remodeling, repair, and maintenance of buildings and similar or related structures may warrant classification to either the Architecture Series, GS-808, or the Civil Engineering Series, GS-810. When knowledge of engineering principles is essential for successful performance such positions are classified to the Civil Engineering Series, GS-810. When architectural principles are essential for successful performance such positions are classified to the Architecture Series, GS-808.

PAGE 8 1-/86 TS-77

7. Positions involving specialized professions engineering work related primarily to the design, construction, installation, operation, testing or inspection of auxiliary equipment installed in buildings are classified to the mechanical, electrical, or other appropriate engineering series.
8. Professional work primarily concerned with the design or construction of bridges, culverts, cableways, and tramways coincident to highway planning and development; the stress analysis and design of foundations and structural framing of concrete, timber, steel, and masonry structures; or in the development of improved structural design features, standards, and tools. Such work is included in the Civil Engineering Series, GS-810.
9. Positions predominantly concerned with the artistic design of interiors of buildings which requires a thorough knowledge of the fundamental principles and theories of professional interior design are included in the General Arts and Information Series, GS-1001. Also included in the referenced series are professional positions concerned with industrial design. However, positions concerned with such work as an adjunct to or in conjunction with grade or recruitment controlling architectural work are included in the Architecture Series, GS-808.
10. Positions involved primarily in surveying work are excluded from the Architecture Series, GS-808. Positions which involve the conduct or execution of surveys are primarily nonprofessional in character. However, positions which involve responsibility for investigation, development, evaluation, selection, or adaptation of surveying plans, methods, and techniques as in the planning or management of complex surveying projects may be professional. Specific professional series have been established in recognition of the specialized qualifications required for professional competence in these areas. See the Geodesy Series, GS-1372, and the Land Surveying Series, GS-1373.

With the noted exceptions, professional competence in surveying is intimately associated with and is an element of professional competence in civil engineering. Accordingly, in the absence of a specifically appropriate series, professional surveying positions may be classifiable to the Civil Engineering Series, GS-810. However, positions concerned with such work as an adjunct to or in conjunction with grade or recruitment controlling architectural work are included in the Architecture Series, GS-808.

TITLES

The basic title for all positions in this series is "Architect." Positions at the lower grade levels in this series are typically trainee or developmental levels. An organizational title of "Architectural Intern" may be used for these positions at the GS-5 and GS-7 levels. The title "Supervisory Architect" is to be used for those positions that involve supervisory duties and responsibilities that meet or exceed the criteria for evaluation as a supervisor in the General Schedule Supervisory Guide.

Architects may specialize in a variety of ways, such as by function or purpose of work, e.g., research; project planning; design involving activities such as preliminary drawings, construction drawings, specifications, and estimates; construction including activities such as contractual undertakings, construction management, and inspection of field operations; or conservation including activities such as preservation; restoration, reconstruction, reconstitution, rehabilitation, and recycling; or staff advisory services. Other architects specialize in particular types of buildings. The required specialized knowledge may be considered, as appropriate, in determining selective placement requirements and for other personnel management purposes.

GRADING OF POSITIONS

The factor level description as provided in this standard may be used to classify nonsupervisory architect positions in functional areas for which there are no separate grade evaluation guides. Benchmarks as provided in this standard cover nonsupervisory architect positions at grades GS-5 through GS-14. Two types of work are specifically covered by this standard:

- Professional work which is accomplished primarily by application of, modification of, adaptation of, or compromise with standard guides, precedents, methods, and techniques.
- Professional work which involves staff assignments as technical consultants and advisors and/or program coordinator-reviewers in architectural organizations engaged in or concerned with the preceding type of work.

PAGE 10 10/86 TS-77

Excluded from the coverage of the grade level criteria in this standard are the following categories of positions:

- *Research* -- Research positions should be evaluated by reference to the Research Grade-Evaluation Guide. The guide may also be used to evaluate the research portion of mixed positions.

- *Research Grants* -- Positions primarily concerned with evaluating and recommending approval of architectural research grants and contracts should be evaluated by reference to the Research Grants Grade-Evaluation Guide.
- *Education Training* -- The Grade-Evaluation Guide for Instructor and Specialist Positions Involving Education and Training Work provides classification criteria for positions of architects engaged in education.
- *Supervision* -- Supervisory positions should normally be evaluated by reference to the General Schedule Supervisory Guide. However, where the nonsupervisory work of the position (1) is a regular part of the job, (2) requires materially higher qualifications than the supervisory work, and (3) clearly constitutes the paramount responsibility, the position should be evaluated by reference to this standard.

EVALUATION NOTES

Positions should be evaluated on a factor-by-factor basis, using one or more of the Office of Personnel Management benchmarks or by reference to the Factor Level Descriptions for the Architecture Series. Only the designated point values may be used. More complete instructions for evaluating positions are contained in the introductory material for the Factor Evaluation System. The absence of a benchmark for positions at any grade does not preclude evaluation of positions at that grade.

PAGE 11 10/86 TS-77

GRADE CONVERSION TABLE

Total points on all evaluation factors are converted to GS grades as follows:

Grade	Range	Grade	Range
GS-5	855 - 1100	GS-10	2105-2350
GS-6	1105 - 1350	GS-11	2355-2750
GS-7	1355 - 1600	GS-12	2755-3150
GS-8	1605 - 1850	GS-13	3155-3600
GS-9	1855 - 2100	GS-14	3600-4050
			4055 & up

FACTOR LEVEL DESCRIPTIONS

FACTOR I, KNOWLEDGE REQUIRED BY THE POSITION

This factor measures the nature and extent of information or facts which the architect must understand to do acceptable work (e.g., steps, procedures, practices, rules, policies, principles, theories, and concepts) and the nature and extent of skills necessary to apply these knowledges. The knowledges and skills of an architect relate to the programming and preliminary planning for and or the actual design and/ or construction or improvement of buildings and related structures. To be used as a basis for selecting a level under this factor, a knowledge must be required and applied.

Level 1-5 -- 750 Points

A basic foundation of the professional concepts and principles of architecture including fundamentals of architectural and structural design; site planning; current building construction methods; building or construction materials, their uses, and relative values; terminology, units of measurement, and their interrelationships; and building equipment and codes involving public health and safety. These knowledges would typically be acquired through a bachelor's degree program in architecture or architectural engineering, or equivalent professional training and experience.

OR

Equivalent knowledge and skill.

Illustrations:

- Takes measurements and makes sketches as requested, when accompanying higher-grade employees on field reconnaissance trips.
- Conducts office and library searches for examples of planning and design to be used by employees of higher grades.
- Copies, traces, alters, letters, or titles drawings; makes schedules, charts, and diagrams, and drafts working drawings for simple structures or projects (e.g., the smallest offices and border stations or buildings of equal simplicity) that involve few, if any, architectural problems.
- Makes space allocation plans by drawing overlay plans of such elements as walls, partitions, stairs, doors, windows, and elevators to show arrangement of space; and

computes areas of spaces and notes them on assignment plans, including such items as titles of spaces, exterior dimensions, and door numbers.

- Computes areas and volumes and extends quantities for estimating purposes.
- Assembles from records, reports, publications, other Government sources, and local contracts specified basic raw data on unit cost by type of construction and by geographic location.
- Estimates gross quantities of conventional building materials to be utilized in the construction of a specific project involving such items as sidewalks, driveways, filling and grading, brick work, concrete, and plastering, and matches with recorded local prices.

Level 1-6 -- 950 Points

A professional knowledge of conventional methods and techniques of architecture which would enable the architect to independently perform assignments of moderate difficulty, i.e., those which do not require significant deviation from established methods and precedents. In addition, a general familiarity with the practices of related engineering disciplines such as civil, mechanical, and electrical. Assignments at this level are limited and are characterized by such features as:

- a problem that is straightforward, or has been singled out of a larger investigation or project;
- unknown factors or relationships are primarily matters of a factual nature or the mechanisms involved are fairly well understood;
- data can be obtained by use of established analytical and investigative methods and techniques with minor modifications and adaptations that can be worked out by conventional procedures; or
- the objectives to be reached are clearly identified and are realizable by minor adaptation of precedents and established practices.

PAGE 13 10/86 TS-77

OR

Equivalent knowledge and skill.

Illustrations:

- Develops from client requirements and alternate solutions defined by supervisor, graphic analysis charts, diagrammatic sketches, tentative sketches, definitives, schematic outlines,

or other architectural design studies that are limited in difficulty because of one or more controlling characteristics of the projects or structures such as low construction costs, small size, standardized architectural elements, singleness of purpose, lack of specialized or unique functions, or other project characteristics of equal complexity.

- Drafts working drawings for floor plans, elevations, sections, and occasionally scale details, for simple structures, e.g., small buildings, houses, or border inspection stations, standardized parts of larger buildings, or other buildings of equal complexity.
 - Prepares full-size details for simple structures in accordance with office requirements.
 - Checks contractor's shop drawings against architectural contract drawings and specifications for simple structures for conformity with contract requirements.
 - Develops portions of preliminary designs for elevations, partitions, doors, stairs, or various design details that conform with architectural concepts developed by an employee of higher grade for the complete structures to which these components belong except when such portions or details are prominent or significant parts of structures having unique, unusual or novel problems.
- PAGE 14 10/86 TS-77
- Makes tentative estimates for the construction of an entire simple structure by comparing tentative designs with detail drawings and actual costs of closely similar structures, e.g., radio monitoring stations, border or customs stations, family housing, warehouses, and small bowling alleys.
 - Develops assigned sections of project specifications pertaining to such materials and construction methods as composition roofing, resilient floor material, plaster work, painting, foundation water proofing, and structural steel framing, involving the selection and adaptation of applicable stock paragraphs and such determinations as color and type for specific uses where the area of choice of alternates has been specified in advance by the supervisor.
 - With the area of choice of alternates clearly set in advance, writes complete specifications for small independent contracts (e.g., several thousand dollars or less) for seeding and planting, macadam or concrete driveways, sidewalk and curbs, and plaster-painting, or contracts for minor alterations and repairs such as reroofing, reflooring, or repainting or general repairs to single family dwellings.
 - Integrates into final detailed specifications, portions prepared by others, covering architectural, structural, mechanical, and electrical materials, items, equipment, and installations; examines plans for mechanical equipment for effect on architectural requirements and examines installation instructions. Recommends corrective action when clarification is necessary or inconsistencies are present.

- Responsible for construction progress and inspection of simple segments (e.g., excavation for foundations, form erection, placing of steel, sleeving, pouring concrete, rough and inside finished carpentry, and painting) of small projects (e.g., duplex residence) or simple segments of larger projects (e.g., 250 bed hospital, hangar, recreation center).

PAGE 15 10/86 TS-77

Level 1-7 -- 1250 Points

Professional knowledges applicable to a wide range of architectural duties and the skill sufficient to: (1) modify standard practices and adapt techniques to solve a variety of architectural problems; (2) adapt precedents or make significant departures from previous approaches to similar projects to accommodate the specialized requirements for some projects; and (3) apply the standard practices of engineering disciplines as they relate to a specific assignment.

OR

Equivalent knowledge and skill.

Illustrations:

- Examines and analyzes architectural drawings, plans, designs, specifications, and exhibits submitted by sponsors of large housing projects prior to filing formal application for mortgage insurance indorsement with the field office, determining the general eligibility and feasibility of the sponsor's proposals, making counter proposals for improvement in planning, design, and construction supported as necessary by plan, sectional, and perspective sketches.
- Conducts preplanning studies to adapt existing scientific laboratories for new or experimental research including such requirements as layouts, site planning, sequential stages of the development of projects in the field, space, functions, calculations, and cost estimates.
- Makes measured drawings of existing structural conditions and of design features, detailed drawings of stabilization methods calculated to insure preservation of original structures, and designs of details to be reconstructed or restored reflecting the spirit, character, and period of individual historic structures.
- Develops complete working drawings, including floor plans, interior and exterior elevations, sections, and scale and full-size details of structures including those that involve such problems as: extreme and variable climate conditions; complications arising from construction cost limitations and scarce building materials required for novel functions; presence of strong local influences, peculiar environmental conditions, or numerous codes and regulations that conflict with practical or functional needs or that

restrict architectural methods; novel conflicts among aesthetic, functional, economical, and practical features that require balancing the relative weight of architectural features.

PAGE 16 10/86 TS-77

- Checks working drawings prepared in the office or by contract architects for all types of structures to assure accuracy, completeness, and agreement between architectural and engineering elements, tentative sketches, and the specifications.
- Checks contractors shop drawings for all types of structures against contract drawings and specifications for completeness, accuracy, and conformity with contract requirements.
- Develops from space directives and client requirements, graphic analysis charts, diagrammatic sketches, tentative sketches, definitives, schematic outlines, or other architectural design criteria for projects which involve complications such as: cost limitations, rugged terrain; scarce building materials; special types of building occupants; multiple functions; safety hazards arising from special activities; variable climatic and seismic conditions; lack of precedents in designs for specialized functions; use of new building materials; presence of strong local influences; peculiar environmental conditions; numerous codes and regulations that conflict with functional, aesthetic, or economic needs or that restrict architectural design methods and approaches; and novel complications among aesthetic, or economic needs or that restrict architectural design methods and approaches; and novel complications among aesthetic, functional, economic, and practical design features that require balancing the relative weight of all architectural features.
- Develops general cost figures for a project of significant size and scope from tentative plans and functional requirements, based on cost data for similar projects or structures.

PAGE 17 10/86 TS-77

- Writes and/or edits specifications for (a) construction of buildings and groups of buildings including hospitals, large office buildings housing several agencies, buildings having monumental features, and others of comparable size and complexity where conventional materials and structural designs are used, and (b) various types of fixtures such as wall cabinets and finishing hardware. Studies building designs and drawings in the developmental stage to ascertain whether proposed materials are best and most economical for the purpose; discusses with architectural and engineering designers use of materials and recommends improvements and changes in construction features; confers with and advises contract architects and engineers on specification matters; integrates specifications for mechanical and electrical equipment and installations into final detailed specification, eliminating duplications and clarifying technical requirements.
- Serves as a specialist in a specific field of specification writing (e.g., finishing hardware for monumental buildings, neuropsychiatric hospitals, prisons; acoustic control materials for

floors, walls and ceilings requiring unusual provisions for electronic shielding, sealing for dehumidification, and exact controls on sound waves of all frequencies).

- Checks or reviews work on projects planned by contracting architects for quantities, costs, accuracy, completeness, conformity with contract requirements, and agreement between architectural and engineering elements, sketches and specifications, or work of similar level and difficulty performed within the agency.
- Analyzes and coordinates requested design or construction changes of any size or cost after award of contract, recommending need for contract changes, authorizing preparation of drawings and specifications for proposed or approved changes, furnishing technical and cost information to higher authority to support decisions or modification of contract, and reviewing contract drawings, specifications and related data on questions involving the intent of the documents.

PAGE 18 10/86 TS-77

- Responsible for contract construction of a multistory structural steel or reinforced concrete building with appurtenant outside utilities and a wide variety of mechanical and electrical installations.
- Responsible for contract construction of a complex multistoried structure of structural steel, reinforced concrete, and masonry having numerous mechanical and electrical installations and requiring use of a variety of trades in finishing operations.
- Investigates and develops local or regional design standards, criteria, and planning guides, and reviews and evaluates preliminary designs developed according to such standards for the construction of specific type structures.

Level 1-8 -- 1550 Points

Mastery of one or more architectural functions to the extent that the architect is capable of applying new developments and experienced judgment to: (1) extend or modify architectural methods and techniques; (2) resolve problems which are singular in kind or without equal; and (3) develop new approaches for use by other design or construction specialists in solving a variety of architectural problems. Typically, the architect is a recognized expert in the function(s) involved and the exploitation of basic scientific knowledge. As a recognized expert, the architect is sought out for advice and consultation by colleagues who are, themselves, professionally mature. The architect typically speaks and deals responsibly on technical matters outside the employing organization as well as within and might, for example, have an important committee assignment in a professional organization.

OR

Equivalent knowledge and skill.

Illustrations:

- Develops, from client requirements, graphic analysis charts, diagrammatic sketches, tentative sketches, definitives, schematic outlines, or other architectural design criteria for multibuilding groups (e.g., institutions, large housing projects, multipurpose buildings, and industrial plants) involving rare or unique problems.

PAGE 19 10/86 TS-77

- Serves as a technical authority on all aspects of planning, design, or construction within a major organization of an agency or department serving a multistate area to advise on the interpretation and implementation of technical policy directives and programs as well as the review of plans and specifications for projects in the organization and to provide consultative services concerning the full range of buildings and related structures within specifications as well as portions of agency technical handbooks for guidance of agency architectural and engineering specialists, nationwide, and to furnish advice on the use and interpretation of the assigned technical guides.
 - Develops preliminary plans and working drawings, and reviews those developed under contract by A/E firms, for multimillion dollar medical complexes with a wide variety of highly specialized types of structures and involving both new construction and renovation of existing buildings. Projects combine phasing construction with existing life-support operations and involve complicated combinations of functional, aesthetic, technological and economic factors as well as public interest in design considerations.
 - Develops from space directives and client requirements graphic analysis charts, diagrammatic sketches, tentative sketches, definitives, schematic outlines, or other architectural design criteria for underground facilities to reflect interior arrangements, color treatment, and intercommunication passages involving such problems as space and cost limitations that conflict with providing industrial, military, and human living requirements; congested occupancy by mixed sexes for indefinite periods that makes the livability factor of supreme importance; and requirements for special aesthetic treatment to provide interior designs that create illusions of space.
- PAGE 20 10/86 TS-77
- Provides staff advisory, consulting, and reviewing services within a centralized architectural office of an agency with responsibility for reviewing and coordinating all design and construction work and proposing additional work in light of the needs of the agency.
 - Coordinates and reviews broad programs of an agency headquarters and field offices which are concerned with the design, construction, alteration, maintenance, and use of varied buildings and related structures under diverse conditions at numerous locations.

Level 1-9 -- 1850 Points

Mastery of building design and construction and recognized skill in generating new hypotheses, developing new concepts, and planning and evaluating long range programs and projects; or skill sufficient to function as a nationally recognized consultant and expert in building design and construction.

OR

Equivalent knowledge and skill.

Illustration:

- Serves as a nationally recognized expert consultant to an agency having responsibility for the design and construction of buildings and related structures of unusual size and complexity with responsibility for observing, advising, and reporting on architectural activities nation- or world-wide.

FACTOR 2, SUPERVISORY CONTROLS

This factor covers the nature and extent of direct or indirect controls exercised by the supervisor, the architect's responsibility, and the review of completed work.

PAGE 21 10/86 TS-77

- Controls are exercised by the supervisor in the way assignments are made, instructions are given to the architect, priorities and deadlines are set, and objectives and boundaries are defined.
- The architect's responsibility depends on the extent to which the architect is expected to develop the schedule and sequencing of various aspects of the work, to modify or recommend modification of instructions, and to participate in establishing priorities and defining objectives.
- The review of completed work depends upon the nature and extent of the review, e.g., close and detailed review of each phase of the assignment; detailed review of the finished assignment; spot check of finished work for accuracy; or review only for adherence to policy.

Level 2-1 -- 25 Points

For both one-of-a kind and repetitious tasks the supervisor makes specific assignments that are accompanied by clear, detailed, and specific instructions.

The architect works as instructed and consults with the supervisor as needed on all matters not specifically covered in the original instructions and guidelines.

The work is closely reviewed. The review may include checking progress as well as reviewing completed work for accuracy, adequacy, and adherence to instructions and established procedures.

Level 2-2 -- 125 Points

Continuing or individual assignments are made by the supervisor who indicates generally what is to be done, limitations, quality and quantity to be expected, deadlines, and priority of assignments. The supervisor provides additional, specific instructions for new, difficult, or unusual assignments including suggested work methods or advice on source material available.

The architect uses initiative in carrying out recurring assignments independently without specific instructions but refers deviations, problems, and unfamiliar situations not covered by instructions to the supervisor for decision or help.

PAGE 22 10/86 TS-77

The supervisor assures that finished work and methods used are technically accurate and in compliance with instructions or established procedures. Review of work increases with more difficult assignments if the architect has not previously performed similar assignments.

Level 2-3 -- 275 Points

The supervisor makes assignments by defining objectives, priorities, and deadlines; and assists the architect with unusual situations which do not have clear precedents.

The architect plans and carries out the successive steps and deals with problems and deviations in the work assignments in accordance with instructions, policies, previous training, or accepted architectural practices.

Completed work is usually evaluated for technical soundness, appropriateness, and conformity to policy and requirements. The methods used in arriving at the end results are not usually reviewed in detail.

Level 2-4 -- 450 Points

The supervisor sets the overall objectives and resources available. The architect and supervisor, in consultation, develop the deadlines, projects and work to be done.

The architect, having developed expertise in the work involved, is responsible for planning and carrying out the assignment; resolving most conflicts which arise; coordinating the work with others as necessary; and interpreting policy on own initiative in terms of established objectives. In some assignments, the architect also determines the approach to be taken and the methodology to be used. The architect keeps the supervisor informed of progress, potentially controversial matters, or far-reaching implications.

Completed work is reviewed only from an overall standpoint in terms of feasibility, compatibility with other work, or effectiveness in meeting requirements or expected results.

Level 2-5 -- 650 Points

The supervisor provides administrative direction with assignments in terms of broadly defined missions or functions.

The architect has responsibility for planning, designing, and carrying out programs, projects, studies, or other work independently.

PAGE 23 10/86 TS-77

Results of the work are considered as technically authoritative and are normally accepted without significant change. If the work should be reviewed, the review concerns such matters as fulfillment of program objectives, effect of advice and influence on the overall program, or the contribution to the advancement of technology. Recommendations for new projects and alteration of objectives are usually evaluated for such considerations as availability of funds and other resources, broad program goals, or national priorities.

FACTOR 3, GUIDELINES

This factor covers the nature of the judgment needed to apply guidelines. Since individual assignments vary in the specificity, applicability, and availability of guidelines, the constraints and judgmental demands placed upon architects also vary. In the architectural field there are many guides and standard specifications. They serve as checklists and do not relieve the architect of the responsibility for making a judgment that the standards as written are applicable in the particular circumstances at hand. The existence of specific instructions, procedures, and policies may limit the opportunity of the architect to make or recommend decisions or actions; however, in the absence of procedures or under broadly stated objectives, the architect may use considerable judgment in researching literature and developing new methods. For this factor guidelines refer to standard guides, precedents, methods, and techniques including:

- agency manuals of instructions and operations;
- standard textbooks and publications common to the profession;
- manufacturers' catalogs and handbooks;

- standard designs developed and prescribed by the central architectural staff of the agency;
 - standard, master, or guide specifications developed and prescribed by the central architectural staff of the agency;
 - files of previous projects undertaken by the agency including tentative, alternate and actual sketches; preliminary studies for specific design problems, bid prices, cost and production schedules, and material costs;
- PAGE 24 10/86 TS-77
- basic design and construction practices and methods as taught in architectural courses or generally accepted by architects and other specialists as a result of experience;
 - technical data appearing in publications, building codes of State and local governments and recognized architectural and engineering societies and organizations including regulatory and enforcement agencies; material catalogs; and price indices; and
 - governing policies and procedures of the agency.

Level 3-1 -- 25 Points

The architect, generally a trainee, is provided specific guidelines such as technical manuals, instructions, and criteria that are detailed and directly applicable. The supervisor must authorize any deviations.

Level 3-2 -- 125 Points

The architect is provided detailed and directly applicable guidelines such as standard instructions, literature, precedents, and practices in the area of assignment or specialization. Judgment is required in locating and selecting the most appropriate guidelines and references.

Established procedures for performing the work are used, but the architect may exercise discretion in selection among alternative approaches. The employee may, on an irregular or intermittent basis, make minor deviations to adapt guidelines to specific cases. Situations requiring significant deviations from existing guidelines are referred to the supervisor.

Level 3-3 -- 275 Points

Guidelines include standard instructions, technical literature, agency policies and regulations, manufacturers' catalogs and handbooks, precedents and standard practices in the area of assignment or specialization. The architect independently selects, interprets, and applies the guides, modifying, adapting, and making compromises to meet the requirements of the assignment.

In addition, the architect must exercise judgment in applying standard architectural practices to new situations and in relating new work situations to precedent ones.

Level 3-4 -- 450 Points

Guidelines are often inadequate in dealing with the more complex or unusual problems. The architect is required to use resourcefulness, initiative, and judgment based on experience to deviate from or extend traditional architectural methods and practices in developing solutions to problems where precedents are not applicable. This level may include responsibility for the development of material to supplement and explain agency headquarters guidelines.

Level 3-5 -- 650 Points

Working chiefly under broad and general policy statements, regulations, and laws, the architect exercises considerable judgment and ingenuity in interpreting and adapting guidelines that exist and in developing new and improved hypotheses, approaches, or concepts not previously tested or reported in the literature of the field. Frequently, the architect is recognized as a technical authority in the area of assignment or specialization, and assumes responsibility for the development of policies as well as nationwide standards, procedures, and instructions to guide operating personnel.

FACTOR 4, COMPLEXITY

"Complexity" covers the nature and variety of tasks, steps, processes, methods, or activities in the work performed and the degree to which the architect must vary the work, discern interrelationships and deviations, or develop new techniques, criteria, or information. The basic unit of measuring this factor is the "complex feature." A complex feature is an individual architectural problem, broadly defined, which requires: (1) modification or adaptation of, or compromise with, standard guides, precedents, methods, or techniques; or (2) special considerations of planning, scheduling, and coordination. In crediting a complex feature to a position, the following conditions must be met:

- The duties and responsibilities of the position involve a specific, difficult problem requiring substantial analysis and evaluation of alternatives.
 - The architect in the position solves the problem although it may be subject to preliminary discussion of background and possible approaches, and the solution may be reviewed for technical adequacy as well as for conformance with policy by the supervisor or others.
- PAGE 26 10/86 TS-77
- The solution of the problem involves (a) substantial modification or adaptation of, or compromise with, standard guides, precedents, methods, and techniques, or (b) difficult or unusual planning, scheduling, negotiating, or coordination.

- The architect applies a thorough knowledge of a variety of standard guides, precedents, methods, techniques, and practices in solving the problem.

Variations in the relative difficulty of work involving complex features are reflected below by the number of complex features and by their occurrence in combination. The interaction of complex features in combination is particularly significant in considering the relative intensity of all of the complex features in an assignment.

A complex feature can be concerned with technical architectural work or socioeconomic, administrative, or other aspects of architectural work as illustrated in the following examples of complex features:

- It is necessary to analyze and choose from among two or more standard methods from the standpoint of economy and architectural feasibility, when each approach contains advantages and disadvantages which do not readily or clearly outweigh those of the others. For example, cost considerations may dictate a compromise between a theoretically ideal method and a more economical but technically less satisfactory one. In like manner, there may be social, ecological, or other environmental considerations that make it necessary to analyze and weigh alternatives.
 - Standard material normally used by the agency in a given type of design is unavailable or is not suitable because of unfavorable local conditions. It is necessary to engage in an extensive literature search to arrive at a satisfactory substitute.
- PAGE 27 10/86 TS-77
- In making modifications and alterations to existing buildings and structures it is necessary to: (a) modify the design for loads and stresses not anticipated when the building was originally designed; (b) keep changes and costs to a minimum and (c) modify standards and specifications to meet limitations of existing buildings.
 - Special Planning and scheduling is necessary to integrate completion dates for phases of Government work with phases to be performed by contractors, and, as necessary, to provide for continuing use of existing facilities.
 - When proposed work infringes on State or municipal structures or requires approval of such authorities, the architect coordinates with State or local civil authorities by personal contact and correspondence.
 - The architect presents special written analysis and justification to higher organizational entities regarding the economic, social, ecological, and other benefits that the general public will derive from the proposed work in comparison with the estimated cost of such work.

Level 4-2 -- 75 Points

Assignments usually consist of specific, often unrelated, tasks that are designed to orient a trainee architect in the practical application of theory and basic principles, to ascertain the architect's interest and attitude, and to relieve experienced architects of detailed and simple work. Problems are readily solved by application of basic principles, elementary theories, and established practices. Work often consists of such detailed tasks as making calculations using standard formulas; computing areas and volumes and extending quantities for estimating purposes; copying, tracing, altering, lettering, or titling drawings; conducting office and library searches for examples of planning and design to be used by higher grade architects; assembling specified basic raw data on average cubic cost by type of construction and by geographic location from records, reports, publications, other Government sources, and local contracts; and computing, from tentative sketches or working drawings, gross quantities of conventional building materials going into the construction of items such as sidewalks, filling and grading, brick work, and plastering, and matching with recorded local prices. At this level, tasks may be similar to those of nonprofessional employees, but are assigned primarily for training or developmental purposes.

PAGE 28 10/86 TS-77

Level 4-3 -- 150 points

Assignments may consist of minor phases of a broader assignment of a higher grade architect which have typically been screened to eliminate complex features or may be similar to those previously encountered by the organization in which complex features occur infrequently or in isolated, single units. Assignments are carried out without substantial adaptation or modification of precedents, except for minor deviations - such as sizes, dimensions, and relationships of details which can be resolved by architectural calculations typical of the specialization or area of assignment.

Level 4-4 -- 225 Points

Assignments typically contain combinations (e.g., two to five) of complex features. Work at this level typically involves the application of standard architectural practices to new situations and relating new work situations to precedent ones, and in addition, the modification or adaptation of and making compromises with standard guidelines.

Level 4-5 -- 325 Points

Assignments are of such breadth, diversity, and intensity that they involve many, varied complex features. The work requires that architects be especially versatile and innovative in adapting, modifying, or making compromises with standard guides and methods to originate new techniques or criteria. Individual assignments typically contain a combination of complex features which involve serious or difficult-to-resolve conflicts between architectural and management or client requirements.

Level 4-6 -- 450 Points

Assignments: (a) concentrate on the limitation of proven concepts and practices of building design and/or construction where issues and factors to be considered are largely undefined requiring extensive probing and analysis to determine the nature and scope of the problems; and (b) are characterized by unusual demands that are frequently due to extraordinary emergency, public interest, or economic restraints which create a need for drastic or extreme decisions within the context of standard guides, precedents, methods, and techniques. Analysis, as envisioned at this level, is carried to the point where either a solution is delivered on various problems or alternative further projects (pursued concurrently or sequentially with the support of others within or outside the organization) are initiated to alter standard concepts or theories, the objectives, and/or previously formulated requirements and criteria.

PAGE 29 10/86 TS-77

FACTOR 5, SCOPE AND EFFECT

This factor covers the relationship between the nature of the work, i.e., the purpose, breadth, and depth of the assignment, and the effect of work products or services both within and outside the organization.

Effect measures such things as whether the work output facilitates the work of others, provides timely services of a personal nature, or impacts on the adequacy of research conclusions. The concept of effect alone does not provide sufficient information to properly understand and evaluate the impact of the position. The scope of the work completes the picture, allowing consistent evaluations.

Only the effect of properly performed work is to be considered.

Level 5-1 -- 25 Points

The purpose of the work is to orient the architect in the practical application of academic theory and basic principles. Work tasks are specific and limited and are primarily for training purposes to equip architects to assume more responsible architectural duties. The work's effect is to facilitate the work of other architects within the immediate organizational unit.

Level 5-2 -- 75 Points

The purpose of the work is primarily to provide assistance to experience architects by relieving them of detailed and routine work. Work efforts have an effect on the accuracy and reliability, as well as the timeliness, of the projects being performed by higher level architects.

Level 5-3 -- 150 Points

The purpose of the work is to investigate and analyze any of a variety of problems or conditions and to provide or recommend ways of dealing with them. The architectural determinations affect the design, construction, or alteration of buildings and related structures, with regard to economy, efficiency, and safety.

PAGE 30 10/86 TS-77

Level 5-4 -- 225 Points

The purpose of the work is to provide expertise as a specialist in a particular function or specialized area thereof by furnishing advisory, planning, or reviewing services on specific problems, projects, programs, or functions. The work may include the development of criteria, procedures, or instructions for major agency activities. Work products affect a wide range of agency architectural programs.

Level 5-5 -- 325 Points

The purpose of the work is to resolve critical problems or to develop new approaches or methods for use by other architectural specialists. Often serving as consultant or project coordinator, the architect provides expert advice and guidance to officials, managers, and other architects within or outside the agency, covering a broad range of architectural activities. Results of the efforts affect the work of other architectural experts both within and outside the agency or the development of major aspects of agency architectural programs.

Level 5-6 -- 450 Points

The purpose of the work is to plan and conduct vital architectural programs for the agency, which are often of national or international scope and impact. The architect's recommendations and decisions on highly complex technical and policy areas frequently establish the agency's position, create agency precedents, and guide field installations on matters of major architectural significance. The architect's actions affect the agency's architectural program on a long-term and continuing basis and often influence the programs of other agencies and outside organizations.

FACTOR 6, PERSONAL CONTACTS

This factor includes face-to-face contacts and telephone and radio dialogue with persons not in the supervisory chain. (NOTE: Personal contacts with the supervisor are covered under Factor 2, Supervisory Controls.)

Levels described under this factor are based on what is required to make the initial contact, the difficulty of communicating with those contacted, and the setting in which the contact takes place, e.g., the degree to which the employee and those contacted recognize their relative roles and authorities.

Above the lowest level, points should be credited under this factor only for contacts which are essential for successful performance of the work and which have a demonstrable impact on the difficulty and responsibility of the work performed.

The relationship of Factors 6 and 7 presumes that the same contacts will be evaluated for both factors. Therefore, use the personal contacts which serve as the basis for the level selected for Factor 7 as the basis for selecting a level for Factor 6.

Level 6-1 -- 10 Points

Personal contacts are primarily with higher grade architects or experienced architectural technicians, engineers or engineering technicians within the immediate office or related units within the agency.

Level 6-2 -- 25 Points

Personal contacts are with a number of employees in the agency, but outside the immediate office, such as other architects; architectural technicians; civil, mechanical, or electrical engineers and engineering technicians; interior designers; landscape architects; operating officials, managers, and nonsupervisory specialists of field or staff type functions.

Level 6-3 -- 60 Points

Personal contacts include a variety of officials, managers, professionals, or executives of other agencies and outside organizations. Typical of these contacts are contractor or manufacturer representatives; representatives of private architecture-engineer firms; other professional or para-professionals engaged in or concerned with the design of the cultural and social environment, e.g., urban, regional or community planners, interior designers, and engineers and other architects from other Federal agencies, State and local governments; officials and technical staff members of other Federal agencies, planning commissions, or State, county or local governments.

Level 6-4 -- 110 Points

Personal contacts are with high ranking officials from outside the agency, including key officials and top architectural, engineering, and scientific personnel of other agencies, State and local governments, private industry, and public groups. The architect may also participate, as a technical expert, in committees and seminars of national or even international importance.

FACTOR 7, PURPOSE OF CONTACTS

Purpose of personal contacts range from factual exchange of information to situations involving significant or controversial issues and differing viewpoints, goals, or objectives. The personal contacts which serve for the level selected for this factor must be the same as the contacts which are the basis for the level selected for Factor 6.

Level 7-1 -- 20 Points

Contacts are established primarily, if not solely, for the purpose of obtaining, transmitting, or exchanging factual information.

Level 7-2 -- 50 Points

Purpose of contacts is to discuss functional and other requirements for building to be designed and obtain facts, opinions, and client approval; plan and coordinate architectural, engineering, or equipment features for specific projects; investigate factors involved in selection of sites, current operational problems and functional relationships, design of specific projects, and design or construction standards or criteria; discuss regulatory and cost reduction expedients; establish requirements for proposed construction; explain comparative estimates and advise on alternative types of construction; discuss new construction materials or processes, reconcile differences of opinion; discuss and advise on contract requirements; and generally clarify problems and reach agreement on overall plans and schedules. The persons contacted are usually working toward a common goal and generally are cooperative.

Level 7-3 -- 120 Points

Purpose of contacts is to influence or persuade other architects or subject matter specialists to adopt technical points and methods about which there are conflicts, to negotiate agreements with agencies and contractors where there are conflicting interests and opinions among organizations or among individuals who are also experts in the field, or to justify the feasibility and desirability of work proposals to top agency officials.

Level 7-4 -- 220 Points

Purpose of contacts is to justify, defend, negotiate, or settle highly significant or controversial architectural matters. Architects often represent their agencies in professional conferences or on committees to plan extensive and long-range architectural programs and to develop standards and guides for broad activities.

FACTOR 8, PHYSICAL DEMANDS

This factor covers the requirements and physical demands placed on the architect by the work assignment. This includes physical characteristics and abilities (e.g., specific agility and dexterity requirements) and physical exertion involved in the work, e.g., climbing, lifting, pushing, balancing, stooping, kneeling, crawling, or reaching. To some extent, the frequency or intensity of physical exertion is also considered, e.g., a job requiring intermittent standing.

Level 8-1 -- 5 Points

The work is principally sedentary, although there may be some walking or bending involved in activities such as inspections of installed equipment or construction or field visits.

Level 8-2 -- 20 Points

The work requires regular and recurring construction or field inspections, investigations, or surveys in which there is a considerable amount of walking, stooping, bending, and climbing.

FACTOR 9, WORK ENVIRONMENT

This factor considers the risks and discomforts in physical surroundings or job situations and the safety regulations required.

Level 9-1 -- 5 Points

Work is usually performed in a office setting, although there may be occasional exposure to conditions in buildings or other structures under construction.

PAGE 34 10/86 TS-77

Level 9-2 -- 20 Points

There is regular and recurring exposure to moderate discomforts and unpleasantness such as high noise levels, high or low temperatures, or adverse weather conditions.

Level 9-3 -- 50 Points

Work involves regular and recurring exposure to potentially dangerous or hazardous situations such as working at heights of 100 or more feet above the ground with potential weather extremes, terminal winds, or thunder showers.

OPM BENCHMARK DESCRIPTIONS

ARCHITECT GS-0808-09, BMK #1

Duties

Serves as an architect on the staff of a facility engineering division of a construction agency and designs and lays out renovations of buildings as well as plans for and oversees the maintenance of designated buildings located on governmental installations within a multistate area. Assignments embrace a number of projects at different stages of completion at any one time. Individual projects: (a) involve structures such as single family units, duplexes, townhouses, apartments, and educational or training type buildings; and (b) are generally limited to small, routine preservation or rehabilitation work such as rearranging interior space by removing existing nonload bearing walls and installing new walls, installing solid doors in lieu of hollow core doors, installing metal siding and insulation, painting exterior or interior, and repairing or replacing kitchen cabinets, electrical wiring or plumbing fixtures, roofs, walls, doors, or windows.

- Visits building site to obtain information regarding the condition of the structure and the location of equipment.
 - Reviews prior specifications, architectural plans, and other material pertinent to existing structure.
 - Evaluates data obtained from site visits, review of available plans and documents, and discussion with building occupants; incorporates salient features into design consideration and solutions.
 - Identifies the most economical and efficient procedures for building design and performance and: (a) initiates change orders under open end contracts for contractor to perform desired work; or (b) prepares necessary drawings, specifications, and supporting documents for advertised or negotiated procurements.
 - Prepares: (a) detailed cost estimates for use in award of contracts; and (b) correspondence, technical reports, estimates, fact sheets, status reports, and schedules to complete assignments.
- PAGE 36 10/86 TS-77
- Reviews work of architect-engineer firms for excellence and compliance with regulations and criteria.
 - Confers with contractor to resolve problems that may arise during construction and, based on the problem or condition, prepares sketches or change drawings and specifications that

solve the problem and incorporates such change documents into contract performance documents.

- Reviews and evaluates contractor shop drawings, samples, and material certifications for contract and performance requirements, recommending approval, approval with modification, or rejection.

Factor 1, Knowledge Required by the Position -- Level 1-6 -- 950 Points

- Professional knowledge of architectural concepts and principles and a practical knowledge of conventional methods and practices sufficient to perform relatively routine preservation and rehabilitation work involving varied buildings normally found on military installations.
- Familiarity with related disciplines such as electrical and mechanical engineering.
- Knowledge and skill sufficient to preserve or renovate buildings such as could be acquired by a bachelor's degree in architecture supplemented by experience in the specialty field.

Factor 2, Supervisory Controls -- Level 2-3 -- 275 Points

Supervisor assigns complete projects with instructions as to general types and applications of the concepts to be used and any design commitments that may have been made. Employee makes independent decisions on technical matters which are treatable by standard practices and techniques. Unusual problems are referred to the supervisor with recommendations for solution. Work is reviewed upon completion for technical adequacy and consistency with objectives.

PAGE 37 10/86 TS-77

Factor 3, Guidelines -- Level 3-3 -- 275 Points

Guidelines consist of command and departmental architectural manuals and publications; standard textbooks; local, State and Federal codes and standards; manufacturers' catalogs; and department policy and program directives. The employee is expected to be thoroughly familiar with such guidelines and to be able to interpret them and apply precedents and experience to new situations. Judgment is required to correlate theoretical considerations with experience in selecting, interpreting, and applying existing guidelines.

Factor 4, Complexity -- Level 4-3 -- 150 Points

Assignments primarily involve projects which are relatively routine, in that complex features are nonexistent or occur relatively infrequently. Problems encountered generally require application of varied but standard and well established methods and techniques.

Factor 5, Scope and Effect -- Level 5-3 -- 150 Points

The purpose of the position is to design and lay out renovations of and plan for and oversee maintenance of existing buildings on military installations within a multistate area. Solution of problems involves technical determinations which affect the safety and efficiency of such structures.

Factor 6, Personal Contacts -- Level 6-3 -- 60 Points

Contacts are with architects and engineers within the employing organization; representatives of architect-engineer and construction contractor firms, local and State Governments, manufacturers and material suppliers; and building users or occupants.

Factor 7, Purpose of Contacts -- Level 7-2 -- 50 Points

Contacts are established to exchange information, coordinate projects, discuss project requirements, and obtain information on equipment and materials.

PAGE 38 10/86 TS-77

Factor 8, Physical Demands -- Level 8-1 -- 5 Points

Work is chiefly sedentary with some minor physical activity during visits to building sites.

Factor 9, Work Environment -- Level 9-1 -- 5 Points

Work is performed primarily in an office setting although there are occasional visits to building sites.

TOTAL POINTS -- 1920

PAGE 39 10/86 TS-77

ARCHITECT GS-0808-09, BMK #2*Duties*

Serves as an architect on the staff of a centralized construction activity of an agency and develops working drawings from preliminary design drawings (prepared by others) for the improvement of existing medical facilities. A typical assignment is the realignment of interior walls (excluding load bearing) and the addition of fire stairs to eliminate dead ends in two-story hospital buildings.

- Visits building site to obtain such information as condition of structure, additional or precise measurements and location of equipment.
- Reviews prior specifications, and preliminary designs pertinent to existing structure and proposed changes.

- Translates concepts of preliminary design drawings and data obtained through site visits into plans, evaluations, sections, details, and schedules to portray the design, location, relationships, and dimensions of the structural elements, quantity and kinds of materials, and applicable standards and code requirements, coordinating this information with other subject matter specialists concerned with structural aspects or mechanical and electrical installations.
- Checks and reviews shop drawings, manufacturers' literature, and samples, recommending approval or rejection.

Factor 1, Knowledge Required by the Position -- Level 1-6 -- 950 Points

- Professional knowledge of architectural concepts and principles sufficient to develop working drawings from preliminary design drawings for relatively routine work concerned with the realignment of interior walls and the addition of fire stairs to eliminate dead ends in hospital buildings.
- Familiarity with related disciplines such as electrical and mechanical engineering.

PAGE 40 10/86 TS-77

- Knowledge and skill sufficient to develop working drawings such as could be acquired by a bachelor's degree in architecture or architectural engineering supplemented by experience in the specialty field.

Factor 2, Supervisory Controls -- Level 2-3 -- 275 Points

Supervisor makes specific assignments together with objectives, priorities, time limitations, background information, and anticipated problems. The architect independently carries out the work, handling routine problems without assistance. Unusual problems are referred to the supervisor along with recommendations for solutions. Completed work is reviewed for technical adequacy and soundness of results. Work which deviates from accepted architectural practice is reviewed more closely while in progress and upon completion.

Factor 3, Guidelines -- Level 3-3 -- 275 Points

Guidelines include agency policy and regulations, technical literature, standard practices, and, most importantly, preliminary design drawings for individual projects. The employee exercises judgment in interpreting the preliminary drawings and other relevant data and in selecting and applying appropriate guidelines. Where significant deviations from guidelines are required, the architect generally will refer the problem to the supervisor along with proposed solutions, which are normally accepted. The employee also refers to working drawings developed and prescribed by others for similar projects.

Factor 4, Complexity -- Level 4-3 -- 150 Points

Assignments primarily involve projects which are routine and of moderate scope. Complex features are either nonexistent or occur relatively infrequently. Problems encountered generally require application of varied but standard architectural methods and techniques.

Factor 5, Scope and Effect -- Level 5-3 -- 150 Points

The purpose of the position is to develop working drawings from preliminary drawings to improve or alter existing medical buildings. Solution of problems encountered involves architectural determinations which affect the safety, economy, and efficiency of such buildings.

PAGE 41 10/86 TS-77

Factor 6, Personal Contacts -- Level 6-2 -- 25 Points

Personal contacts are with other architects and engineers within the employing agency.

Factor 7 Purpose of Contacts -- Level 7-2 -- 50 Points

Contacts are established to exchange information, coordinate projects, discuss project requirements, and obtain information on equipment and materials.

Factor 8, Physical Demands -- Level 8-1 -- 5 Points

Work is primarily sedentary in nature with some minor physical activity during visits to building sites.

Factor 9, Work Environment -- Level 9-1 -- 5 Points

Work is performed primarily in an office setting although there are occasional visits to building sites.

TOTAL POINTS -- 1885

PAGE 42 10/86 TS-77

ARCHITECT GS-0808-11, BMK #1*Duties*

Serves as an architect on an agency's staff and coordinates activities concerning the conservation of agency-controlled historic properties for five of ten regional offices comprising the agency. Assignments involve: (a) various aspects of preservation, restoration, rehabilitation, and adaptive use of properties such as custom houses, post offices, and train stations; (b) several projects at

various stages of completion, e.g., planning, design, or construction stage; and (c) projects with a life cycle span that averages two years. Performs the following typical tasks:

- After visiting site locations to inspect existing properties, writes reports concerning the need for current or future conservation and establishing design parameters for the development of plans and designs.
- Reviews plans and designs submitted by regions, maintaining close liaison with contract conservator and architect-engineer firms and representatives of regional offices to assure that architectural requirements are satisfied and that the architectural integrity of the properties is maintained.
- Reviews documentary records of historic fabric (e. g., measured drawings, photographs) and project drawings and specifications and recommends appropriate action to correct undesirable conditions involving structure, finish materials (interior and exterior), mechanical and electrical systems, safety and security provisions, and accessibility for the handicapped. Prescribes or alters tests and testing methods for fabric (e.g., paint, mortar, and other materials) to assure retention of fabric as initially constructed.
- Conducts studies and investigations concerning methods and techniques to preserve agency properties; develops and disseminates appropriate information to regional offices.
- Promotes agency conservation program by participating in activities of organizations such as the Society of Architectural Historians, the National Trust for Historic Preservation, and the Victorian Society of America.

PAGE 43 10/86 TS-77

Factor 1, Knowledge Required by the Position -- Level 1-7 -- 1250 Points

- Knowledge of professional architectural concepts, principles, and practices applicable to a full range of duties concerned with the preservation, restoration, rehabilitation, and adaptive use of such historical buildings as custom houses, post offices, and train stations.
- Knowledge and skill sufficient to adapt standard practices, techniques, and equipment in establishing design parameters for the development of plans and designs normally developed by contract conservator and architect-engineer firms) to preserve historic buildings.
- Familiarity with related engineering disciplines such as mechanical and electrical.

Factor 2, Supervisory Controls -- Level 2-4 -- 450 Points

The supervisor (the agency's historic preservation officer and a qualified architect) makes assignments in the form of responsibility for the conservation activities of five specific regions within the agency together with broad functional responsibilities and broad overall objectives. Individual projects are largely dependent on submissions by the regional offices to which the

architect is assigned, whereas various studies and investigations may be self-generated. Priorities and deadlines for completion of work are established by the architect in consultation with the supervisor. The architect independently plans own work, coordinates with other staff architects and subject matter specialists, resolves problems, and carries assignments through to completion. Work is normally accepted as technically accurate but is generally reviewed for achievement of objectives, conformance with policy, and compatibility with the work of others within the office.

PAGE 44 10/86 TS-77

Factor 3, Guidelines -- Level 3-3 -- 275 Points

Guidelines include agency policies and regulations, standard technical literature, established standards for the design and construction of modern-day buildings, precedents and practices in the field of building preservation and the design and construction of such historic buildings as custom houses, post offices, and train stations. Due to the varied characteristics, scope and magnitude of the historical buildings involved and the different building codes and standards established for varied geographical areas, the architect must use judgment in selecting, interpreting, and applying guidelines, making compromises when necessary. The architect exercises judgment when: (a) coordinating the building conservation program for the regions to which assigned; (b) advising regional and State officials on the interpretation and application of agency policy and regulations; (c) applying standard preservation practices to new situations; or (d) relating precedents to situations with comparable but conflicting issues.

Factor 4, Complexity -- Level 4-4 -- 225 Points

Assignments involve buildings of varied sizes, styles, and ages that are being proposed for or already exist as historic properties. Generally, individual projects involve several complex features that are both technical and socio-economic in nature, e.g., obscure design criteria, architectural conflicts between agency and State or local requirements, and other features associated with or peculiar to a specific plan or design, type of building, or building location.

Factor 5, Scope and Effect -- Level 5-4 -- 225 Points

The purpose of the position is to coordinate the activities concerning the conservation of agency-controlled historic properties for five of ten regional offices comprising the agency. In this capacity, the employee serves as an intermediary between the regional offices assigned and offices of other agencies engaged in significant conservation, preservation, and recreation activities. The employee's recommendations and decisions impact on the agency's historic conservation program in terms of the need for and the scope and extent of agency resources to be expended on preservation, restoration, rehabilitation, and adaptive use of the agency's historic properties.

Factor 6, Personal Contacts -- Level 6-3 -- 60 Points

Contacts, on a regular and frequent basis, are with architects, engineers, historians, and archaeologists within the agency and of other Federal agencies. Contacts, on a irregular and less frequent basis, are also made with similar professionals of State and local historic preservation offices and conservator and architect-engineer firms.

Factor 7, Purpose of Contacts -- Level 7-3 -- 120 Points

Contacts are made to explain the purpose and functions of the agency's historic preservation program and its relationship to the Advisory Council on Historic Preservation, to assure that agency action conforms with Council procedures, to establish or acquire eligibility of agency properties for inclusion in the National Register of Historic Places, to resolve architectural problems associated with a specific plan or design, to develop factual data on which to base recommendations and decisions on issues where there may be conflicting interest and opinions, and to justify the feasibility and desirability of preserving specific properties.

Factor 8, Physical Demands -- Level 8-1 -- 5 Points

The work is chiefly sedentary with some minor physical activity during visits to historic properties.

Factor 9, Work Environment -- Level 9-1 -- 5 Points

The work is usually performed in an office setting, although there is occasional exposure to conditions in or adjacent to historic properties prior to, during, or after preservation.

TOTAL POINTS -- 2615

ARCHITECT GS-0808-11, BMK #2*Duties*

Serves as one of several architects within a regional office of an agency whose mission is to preserve, restore, or rehabilitate industrial, commercial, and public buildings that are under the auspices of the agency anywhere within a 5-state area. Assignments typically involve several projects at various stages of completion, e. g., repair of faulty concrete, repair of leaky basements and roofs; provision of new or added conference rooms, computer or physical fitness facilities, court rooms, or oil analysis laboratory; the return of a 5-story building to its appearance at a particular period in time. Performs the following representative tasks:

- Confers with representatives of agency or client agencies regarding project requirements, needs, building limitations, and functional use of space to determine the most economical solution to satisfy operational needs.
- Investigates building sites to determine the condition of facility and to secure data prior to initiating design and evaluates and translates this data into working drawings and specifications.
- Coordinates with other subject matter specialists (structural, mechanical, and electrical engineers) prior to and during design development to assure that all technical areas are covered, areas of overlapping responsibilities between technical disciplines receive proper design consideration, and that the total project objectives and schedules are met.
- Evaluates design objectives, makes calculations, identifies most economical and efficient procedure for project design, and prepares drawings, specifications and supporting documents for advertised or negotiated procurement.
- Prepares detailed cost estimates to obtain or verify project funding and bid evaluation.
- Prepares correspondence, technical reports, fact sheets, status sheets, reports and schedules as required to complete projects.
- Confers with construction contractor personnel to resolve difficult and unforeseen problems and latent conditions during construction and prepares sketches or change drawings and specifications to solve problems.
- Prepares scope of work and staff hour effort estimates relative to projects to be accomplished on contract and reviews drawings and specifications developed by contract architect-engineer firms for adherence to design requirements, code limitations, and architectural and engineering Fundamentals and principles; prepares design deficiency reports.

PAGE 47 10/86 TS-77

Factor 1, Knowledge Required by the Position -- Level 1-7 -- 1250 Points

- Knowledge of professional architectural concepts, principles, and practices applicable to a full range of duties concerned with the preservation, restoration, or rehabilitation of industrial (e.g., warehouses), and commercial leg., office buildings) facilities.
- Knowledge and skill sufficient to adapt standard design and construction practices and techniques in establishing design parameters and preparing project justifications and specifications for the development of plans and designs to preserve, restore, or rehabilitate industrial, public, and commercial buildings.
- Familiarity with related disciplines such as mechanical, electrical, and structural engineering.

- Knowledge of drafting techniques and conventions and drafting skill sufficient to convey design concepts and ideas and formulate working drawings.
- Knowledge and skill in technical writing sufficient to develop solutions to technical problems such as procedures and methods of installation of materials, extent or scope of work to be performed, quality of materials to be installed, and acceptable levels of workmanship.

PAGE 48 10/86 TS-77

Factor 2, Supervisory Controls -- Level 2-3 -- 275 Points

The supervisor makes assignments in the form of individual projects of work to be done together with overall objectives, priorities, and deadlines. Unusual aspects are pointed out and suggestions may be provided to overcome unique or difficult problems. The architect independently plans own work, coordinates with other architects or engineers, resolves most problems, and carries assignments through to completion. The supervisor or higher grade architect is available to give advice on or technically review unusual or especially difficult problems that are clearly precedential in nature. In such instances, the architect refers such problems together with a proposed plan of action to the supervisor or higher grade architect. The work is normally subjected to review upon completion for technical soundness, achievement of objectives, conformance with policy, and compatibility with the work of other subject matter specialists.

Factor 3, Guidelines -- Level 3-3 -- 275 Points

Guidelines consist of project authorizations, space directives, prospectus, and scope of work statements; agency technical handbooks, design data, standard details, guide specifications; industry standards and Federal specifications, local building codes, test reports and text books; and agency policy bulletins and design documents (drawings and specifications) of previous projects. The architect is expected to be thoroughly familiar with such guidelines and to be able to interpret them and apply precedents and experience to new situations. Judgment and originality are required to correlate theoretical considerations with experience to produce architectural or engineering compromises and to plan and coordinate actions promptly to assure efficient and technically adequate buildings.

PAGE 49 10/86 TS-77

Factor 4, Complexity -- Level 4-4 -- 225 Points

Assignments involve conventional (and occasionally, unconventional) aspects of architecture concerning the effective preservation, restoration, or rehabilitation of industrial, commercial, and public buildings. Individual assignments include projects that generally vary in complexity from one project to another but include those involving a combination of several complex features, requiring the employee to use different approaches. Technical issues encountered typically fall within the state-of-the-art.

Factor 5, Scope and Effect -- Level 5-3 -- 150 Points

The purpose of the position is to perform architectural work for the preservation, restoration, or rehabilitation of industrial, commercial, and public buildings that are under the auspices of the agency within a five-state area. The employee's work has an impact on the safety, economy, and efficiency of such facilities.

Factor 6, Personal Contacts -- Level 6-3 -- 60 Points

Contacts are with officials, architects, engineers, and building managers within the agency or of client agencies, contract architect-engineers, construction contractors, and (upon occasion) representatives of Federal, State, or municipal regulatory or enforcement agencies.

Factor 7, Purpose of Contacts -- Level 7-3 -- 120 Points

Contacts are established to explain the purpose and function of the design and construction program; conduct surveys and investigations, resolve specific architectural problems; develop factual data on which to base recommendations and decisions on issues where there may be conflicting interest and opinions; and justify feasibility and desirability of preserving, restoring, or rehabilitating existing buildings.

Factor 8, Physical Demands -- Level 8-1 -- 5 Points

The work is chiefly sedentary requiring adequate eyesight for close drafting work and the functional use of both arms and hands. Physical activity is required, on an infrequent or irregular basis, during visits to building sites, e.g., climbing stairs and ladders, climbing in and out of trenches, or crawling through tunnels or restricted areas.

PAGE 50 10/89 TS-77

Factor 9, Work Environment -- Level 9-1 -- 5 Points

The work, for the most part, is performed in an office setting, although there is occasional exposure to conditions in or adjacent to buildings undergoing preservation, restoration, or rehabilitation.

TOTAL POINTS -- 2365

PAGE 51 10/86 TS-77

ARCHITECT GS-0808-11, BMK #3*Duties*

Serves as an architect on the staff of a facility engineering division for a construction agency with responsibility for the design, layout, and construction of buildings located on governmental installations within a multistate area of the continent and at overseas locations. Assignments: (a) include new construction of and additions and renovations to office buildings and other structures such as personnel housing, training facilities, hangars, industrial shops, gymnasiums, recreation facilities, medical facilities, and related buildings; and (b) encompass building or project sites within a multistate region with diverse climatic and geographical environmental conditions.

- Conducts, as required, surveys and investigations of building sites to determine the condition of structures and to secure necessary data prior to initiating design. Evaluates data obtained, incorporating salient features into design considerations and solutions.
 - Evaluates design objectives, identifies most economical and efficient procedures for building design and performance considering all functional and aesthetic requirements and: (a) performs inhouse design, coordinating with other architects or engineers to ensure that all technical areas are covered, areas of overlapping responsibilities between technical disciplines receive proper design consideration, and that total building objectives and schedules are met; or (b) prepares necessary drawings, specifications, and supporting documents for advertised or negotiated procurements.
 - Prepares: (a) detailed fee estimates for use in negotiating with architect-engineer firms for design services, and (b) correspondence, technical reports, estimates, fact sheets, status reports, and schedules to complete assignments.
 - Reviews work of architect-engineer firms to ensure design excellence and compliance with regulations and established specifications.
- PAGE 52 10/86 TS-77
- Confers with construction contractor to resolve problems or latent conditions that may arise during construction and, based on the problem or condition, prepares sketches or change drawings and specifications solving the problem or condition and incorporates such change documents into contract performance documents.
 - Reviews and evaluates contractor shop drawings, samples, and material certifications for contract and performance requirements; recommends approval, approval with modification, or rejection.

Factor 1, Knowledge Required by the Position -- Level 1-7 -- 1250 Points

- Knowledge of professional architectural concepts, principles, and practices applicable to a full range of duties concerned with the design, layout, and construction of office buildings and such other structures as troop housing, hangars, industrial shops, gymnasiums, and training, recreation, or medical facilities.
- Knowledge and skill sufficient to design the types of buildings noted above such as could be acquired through a bachelor's degree program in architecture supplemented by several years experience in the specialty field.
- Familiarity with related engineering fields (e.g., electrical and mechanical) sufficient to ensure that areas of overlapping responsibilities between technical disciplines receive proper design considerations and that total project objectives are met.

Factor 2, Supervisory Controls -- Level 2-3 -- 275 Points

Supervisor assigns work in terms of project objectives and priorities. The architect determines the nature of the questions and issues involved and independently plans and carries out the work assignment according to accepted architectural practices. Unusual or complex problems are referred to the supervisor, accompanied by recommendations or alternate solutions. Completed work is reviewed for adequacy, soundness of technical judgment, and compatibility with work of other architects. Detailed calculations, findings, and recommendations on routine assignments are accepted as technically accurate but may be checked or verified infrequently for achievement of objectives.

PAGE 53 10/86 TS-77

Factor 3, Guidelines -- Level 3-4 -- 450 Points

Guidelines include division, command, and agency instructions on architectural matters, manufacturers' literature, architectural texts, and precedents for similar situations. Such guidelines are often inadequate in dealing with individual assignments in that they seldom provide concrete solutions to specific design problems. The employee deviates from standard or conventional architectural practices and methods to solve problems for which precedents are not directly applicable due to such factors as unusual local conditions (climatic or geographical) or the specialized requirements of a particular facility. The architect adapts techniques or methods and uses experienced judgment in selecting approaches and evaluating findings.

Factor 4, Complexity -- Level 4-4 -- 225 Points

Assignments involve conventional (and occasionally, unconventional) aspects of architecture concerning the effective design, layout, and construction of different type buildings and related structures found on military installations. Individual assignments involve a combination of two to five complex features that generally vary from one project to another in scope or magnitude and

require the architect to use different approaches. Technical issues generally fall well within the state-of-the art.

Factor 5, Scope and Effect -- Level 5-3 -- 150 Points

The purpose of the position is to perform architectural design for new construction and additions or renovations to existing buildings. The work affects the efficiency, economy, safety, adequacy, and aesthetics of buildings to which assigned.

PAGE 54 10/86 TS-77

Factor 6, Personal Contacts -- Level 6-3 -- 60 Points

Contacts are established with architects and engineers within the employing organization; project managers at command and agency headquarters; representatives of architect-engineer firms, local and State governments, code producing organizations, manufacturers and material suppliers; and members of professional and technical societies.

Factor 7, Purpose of Contacts -- Level 7-3 -- 120 Points

Contacts are established to conduct surveys and investigations; resolve specific design or construction problems; develop factual data upon which to base recommendations and decisions on issues where there are conflicting interest and opinions; justify feasibility and desirability of modifying existing rather than constructing new buildings; and motivate field technical personnel toward safe and continued use of good architectural practices.

Factor 8, Physical Demands -- Level 8-1 -- 5 Points

The work is essentially sedentary with occasional physical activity (walking, climbing, bending, or stooping) during field surveys or the inspection of existing buildings.

Factor 9, Work Environment -- Level 9-1 -- 5 Points

The work is performed primarily in an office setting, although there are occasions for irregular visits to building site locations within the continental limits or overseas.

TOTAL POINTS -- 2540

PAGE 55 10/86 TS-77

ARCHITECT GS-0808-11, BMK #4

Duties

As one of several architects on the staff of a centralized construction activity of an agency, develops working drawings from preliminary designs (prepared by others) for the construction

of technical of new or rehabilitation of existing institutional facilities (e.g., nursing homes, domiciliaries, or educational buildings) and such other structures as medical research buildings or data processing centers. Illustrative of rehabilitation projects are the conversion of: a three story bakery to an animal research facility or, a surgical suite from five to four operating rooms to increase their individual size and provide added space for x-ray facilities. Assignments embrace a number of such projects: (a) at different stages of completion at any one time; and (b) at any one of 171 different localities nationwide.

- Surveys or investigates proposed site or existing structure to note physical features and mechanical and electrical equipment and service lines, takes check of dimensions, checks construction details and interior finishes and evaluates existing space and equipment in terms of technical and economic features evident on preliminary drawings. Confers with medical specialists to resolve conflicts with preliminary drawings.
- Translates concepts of preliminary design drawings and data obtained through survey or investigation into plans, elevations, sections, details, and schedules to portray the design, location, relationships, and dimensions of the varied structural elements, quantity and kinds of materials, and applicable standards and code requirements. Coordinates with and integrates efforts of other subject matter specialists concerned with plumbing, heating, air-conditioning and electrical installations and the structural aspects of foundations and superstructure.

PAGE 56 10/86 TS-77

- Checks and reviews shop drawings, manufacturers' literature, and samples and recommends approval or rejection.
- Inspects completed construction projects to assure that architectural components are built and installed in accord with contract provisions (of which the working drawings are a part), specifications, and approved shop drawings.

Factor 1, Knowledge Required by the Position -- Level 1-7 -- 1250 Points

- Knowledge of professional architectural concepts, principles, and practices applicable to a full range of duties concerned with the development of working drawings for the construction of new or rehabilitation of existing institutional facilities (i.e., educational buildings and extended care facilities such as nursing homes and domiciliaries) and such other structures as medical research buildings or data processing centers.
- Knowledge and skill sufficient to portray the design, location, relationships, and dimensions of varied structural elements, quantity and kinds of materials, and applicable standards and code requirements such as could be acquired through a bachelor's degree program in architecture supplemented by several years experience.

- Familiarity with related disciplines (e.g., mechanical, electrical and civil engineering) to ensure that areas of overlapping responsibilities receive proper design considerations and that total project objectives are met.

Factor 2, Supervisory Controls -- Level 2-3 -- 275 Points

Supervisor assigns work in terms of specific projects together with overall objectives and priorities. The architect independently plans own work, coordinates with other architects and subject matter specialists, and carries assignments through to completion. Detailed calculations, findings, and recommendations on routine assignments are accepted as technically accurate but may be checked or verified to assure that objectives are being accommodated. Unusual or complex problems are referred to the supervisor, accompanied by recommendations or alternate solutions. Completed work is reviewed for adequacy, soundness of technical judgment, and compatibility with work of others.

PAGE 57 10/86 TS-77

Factor 3, Guidelines -- Level 3-4 -- 450 Points

Guidelines include agency instructions on architectural matters, matters, manufacturers' literature, architectural texts, and precedents for similar situations. Such guidelines are often inadequate in dealing with individual assignments in that they seldom provide directly applicable solutions to specific design problems. The architect deviates from standard or conventional architectural practices and methods to solve problems for which precedents are not directly applicable due to such factors as deficient preliminary design drawings, outdated standard design criteria, unusual local climactic or geographical conditions, or specialized requirements of a particular structure. The architect adapts techniques or methods and uses experienced judgment in selecting approaches and evaluating findings.

Factor 4, Complexity -- Level 4-4 -- 225 Points

Assignments involve conventional aspects of architecture concerning the development of working drawings for the eventual construction of new or rehabilitation of existing institutional-type facilities and such other structures to support medical research or data processing functions. Individual assignments involve a combination of two to five complex features that generally vary from one project to another in scope or magnitude, and require the architect to use different approaches. Technical issues generally fall well within the state-of-the-art.

Factor 5, Scope and Effect -- Level 5-3 -- 150 Points

The purpose of the position is to develop working drawings for the construction of new and the rehabilitation of existing buildings. The work affects the efficiency, economy, safety, adequacy, and aesthetics of buildings to which assigned.

PAGE 58 10/86 TS-77

Factor 6, Personal Contacts -- Level 6-2 -- 25 Points

Contacts are established with architects and other subject matter specialists including engineers and medical officers within employing agency.

Factor 7, Purpose of Contacts -- Level 7-2 -- 50 Points

Contacts are established to plan and coordinate individual projects and to resolve problems such as deficiencies in preliminary design drawings or discrepancies with standard design criteria. Individuals contacted generally have a common interest and are cooperative.

Factor 8, Physical Demands -- Level 8-1 -- 5 Points

The work is essentially sedentary in nature although there is occasional walking and bending during the conduct of surveys or investigations at proposed sites or building locations.

Factor 9, Work Environment -- Level 9-1 -- 5 Points

The work is usually performed within an office setting except for occasional travel to conduct onsite surveys or investigations and and inspections.

TOTAL POINTS -- 2435

PAGE 59 10/86 TS-77

ARCHITECT GS-0808-12, BMK #1

Duties

Serves as an architect on the staff of a facility engineering division for a construction agency with responsibility for the design, layout, and construction of buildings located on military installations within a multistate area of the continent and at overseas locations. Assignments: (a) include new construction of such structures as multistory office buildings, steam plants hospitals, maintenance shops, manufacturing facilities, and training facilities; and (b) encompass building or project sites within a multistate region with diverse climatic, geographic, and environmental conditions.

- Conducts, or directs the conduct of, investigations of project sites to determine for new construction) feasibility of proposed project; center line, profile, and elevations; and essential linear and angular measurements; or (for additions or renovations) condition of structure and essential data prior to initiating design. Evaluates data obtained, incorporating salient features into design considerations and solutions.
- Evaluates design objectives, identifies most economical and efficient procedures for building design and performance considering all functional and aesthetic requirements and: (a) performs inhouse, design, coordinating with other architects or engineers to ensure that all technical areas are covered, areas of overlapping responsibilities between technical disciplines receive proper design attention, and that total building objectives and schedules

- are met; or (b) prepares necessary drawings, specifications, and supporting documents for advertised or negotiated procurements.
- Prepares: (a) detailed fee estimates for use in negotiating with architect-engineer firms for design services; and (b) correspondence, technical reports, estimates, fact sheets, status reports and schedules to complete assignment.
 - Reviews work of architect-engineer firms to ensure design excellence and compliance with regulations and criteria.

PAGE 60 10/86 TS-77

- Confers with construction contractor to resolve problems or latent conditions that may arise during construction and, based on the problem or condition, prepares sketches or change drawings and specifications to eliminate the problem or condition and incorporates such changes in contract performance documents.
- Reviews and evaluates contractor shop drawings, samples, and material certifications for contract and performance requirements, recommending approval, approval with modification, or rejection.

Factor 1, Knowledge Required by the Position -- Level 1-7 -- 1250 Points

- Knowledge of professional architectural concepts, principles, and practices applicable to a full range of duties concerned with the design, layout, and construction of such structures as multistory office buildings, steam plants, hospitals, industrial type shops, and recreation facilities normally found on military installations.
- Knowledge and sufficient skill to design such buildings, which could be acquired through a bachelor's degree program in architecture supplemented by several years design experience involving such structures.
- Familiarity with related disciplines (e.g., electrical and mechanical engineering) to ensure that areas of overlapping responsibilities between technical disciplines receive proper design considerations and that total project objectives are met.

Factor 2, Supervisory Controls -- Level 2-4 -- 450 Points

The supervisor gives assignments in general terms, indicating priorities and overall objectives. The architect is expected to plan and carry out the work independently, coordinate with others as required, and resolve problems as they occur. Work is reviewed for adequacy of results and compliance with basic objectives.

PAGE 61 10/86 TS-77

Factor 3, Guidelines -- Level 3-4 -- 450 Points

Guidelines include division, command, and agency instructions on architectural matters, manufacturers' literature, texts, and precedents for similar situations. Such guidelines are often inadequate in dealing with individual assignments in that they seldom provide concrete solutions to specific design problems. The architect deviates from standard or conventional architectural practices and methods to solve problems for which precedents are not directly applicable due to such factors as unusual local conditions (climatic, geographic, environmental) or the specialized requirements of the particular facility or structure. The architect adapts techniques or methods and uses experienced judgment in selecting approaches and evaluating findings.

Factor 4, Complexity -- Level 4-5 -- 325 Points

Assignments involve the design, layout and construction or renovation of buildings. The assignments are diverse in nature and cover a number of essentially different architectural problems typical of large multistory structures such as office buildings and medical or training facilities. The architect exercises creativity and experienced judgment in extending traditional techniques or evolving new ones to solve architectural problems. Issues encountered fall within the state-of-the-art but generally involve a combination of many and varied complex features per assignment. The work also requires recognition of the relationship of problems and practices of related disciplines either to solve an engineering problem or to refer it to an appropriate source for assistance.

Factor 5, Scope and Effect -- Level 5-3 -- 150 Points

The purpose of the position is to provide architectural services for the design, layout, and construction of large multistory structures such as office buildings, and medical and training facilities. The architectural determinations affect the design and construction of such structures with regard to economy, type, size, and aesthetic appearance; and comfort or effective use of the structures involved.

PAGE 62 10/86 TS-77

Factor 6, Personal Contacts -- Level 6-3 -- 60 Points

Contacts are made with architects and engineers within the employing organization; project managers at command and agency headquarters; representatives of architect-engineer firms, local and State governments, code producing organizations, manufacturers and material suppliers, construction contractors, and members of professional and technical societies.

Factor 7, Purpose of Contacts -- Level 7-3 -- 120 Points

Contacts are made to conduct surveys and investigations; resolve specific design or construction problems; develop factual data to base recommendations and decisions on issues where there may be conflicting interests and opinions; justify feasibility and desirability of modifying existing rather than constructing new buildings; and motivate field technical personnel toward safe and continued use of good architectural practices.

Factor 8, Physical Demands -- Level 8-1 -- 5 Points

The work is essentially sedentary with occasional physical activity (walking, climbing, bending, or stooping) during field surveys or the inspection of existing buildings.

Factor 9, Work Environment -- Level 9-1 -- 5 Points

The work is performed primarily in an office setting although there are occasions when visits are made to building site locations within the continent or overseas.

TOTAL POINTS -- 2815

PAGE 63 10/86 TS-77

ARCHITECT GS-0808-12, BMK #2*Duties*

Serves as an architect on the staff of a major organizational element of a department with responsibility for planning for and overseeing a number of demonstration projects concerning the rehabilitation and adaptive use of historic industrial structures, e. g., a railroad facility located on an 85 acre site with buildings (roundhouse, machine and erecting shop, outdoor turntable, and several two-story buildings) covering 15 acres, or a three-story cotton mill interconnected to a four-story flour mill (on a two-and-a-half acre site) constructed of brick with interior wood framing. Assignments involve 4-6 projects which are conducted to demonstrate the economic incentives provided by and available under the Tax Reform Act of 1976. Projects typically "are accomplished by a team of subject matter specialists leg., one or more architects, community planners, historians, engineers, and archaeologists) who: (1) document and analyze a structure's initial construction and subsequent alteration through historical, physical, and pictorial evidence, including the existence or nonexistence of water and sewer lines, roads, street lights, and utility lines; (2) document the current. state of a tructure's architectural materials and overall structural stability; (3) conduct a market analysis in terms of new or additional housing, community centers, shops, department stores, food or nonfood markets, schools and day-care facilities, restaurants, offices, or hotel and support facilities; (4) recommend appropriate rehabilitation; (5) establish priorities for project work items; (6) prepare schematic drawings and, (as required for environmental systems) detail drawings; and (7) estimate project costs.

- Organizes, coordinates, and directs demonstration projects, instructing team members in the conduct of projects and the preparation of specific reports and drawings.
- Manages funding and hiring of teams to conduct demonstration projects concerning the adaptive use and planning of specific cultural resources.

PAGE 64 10/86 TS-77

- Visits site locations to review progress of work and resolve problems encountered.
- Instructs public agencies, private investors, and the general public in methods of implementation and intergovernmental coordination of and the economic incentives provided by the Tax Reform Act of 1976 as it pertains to the effective rehabilitation of the Nation's built industrial environment.

Factor 1, Knowledge Required by the Position -- Level 1-7 -- 1250 Points

- Knowledge of architectural concepts, principles, and practices that enables the architect to serve as a staff specialist for the rehabilitation and adaptive use of historic industrial structures.
- Knowledge of and skill sufficient to apply historical conservation methods, techniques and practices to architectural problems inherent in or associated with historical buildings that are not readily treatable by accepted methods.
- Knowledge of related fields of activity or disciplines involved in or concerned with the conservation of historic structures including community planning, history, archeology, and civil, electrical, and mechanical engineering.

Factor 2, Supervisory Controls -- Level 2-4 -- 450 Points

The supervisor indicates the overall objectives for individual projects and confers with the architect on the development of schedules and completion of projects. The architect, however, is responsible for planning and carrying out the work, coordinating with others, and resolving most problems which occur. The supervisor is available, however, for consultation on any major problems encountered. Completed work is reviewed for effectiveness in meeting requirements and to insure conformance with established policies and regulations.

Factor 3, Guidelines -- Level 3-4 -- 450 Points

Guidelines include architectural and related standards, established procedures, and policy statements. While readily available in the form of manuals and publications, the guidelines are frequently inadequate in dealing with problems encountered on individual projects and require the architect to use creativity, experienced judgment, and resourcefulness. The architect selects, adapts, and applies architectural and related principles and practices to situations where precedents are not applicable due to factors such as unfavorable site conditions or the need to

deviate from established practices to minimize costs of rehabilitation versus new construction or to preclude damage to a structure's fabric.

PAGE 65 10/86 TS-77

Factor 4, Complexity -- Level 4-4 -- 225 Points

Assignments usually include four to six projects running concurrently but in geographically dispersed sites. Each of these projects is a demonstration of the economic incentives provided by and available under the Tax Reform Act of 1976, but, in addition, establishes the feasibility of rehabilitating existing historic structures. Individual projects typically contain a combination of two to five complex features and require judgment and resourcefulness to: (a) recognize possible new directions of approach and to devise new or improved procedures to obtain effective results; (b) overcome problems where precedents are not directly applicable; (c) apply the latest technological advances relating to the conservation of buildings; and (d) analyze and evaluate plans, documentation and ideas submitted by others.

Factor 5, Scope and Effect -- Level 5-4 -- 225 Points

The purpose of the position is to plan for and oversee a number of demonstration projects concerning the rehabilitation and adaptive use of historic industrial structures. The work reveals how local governments may use an existing infrastructure while stimulating new business and tax revenues; but, still retain the architectural integrity of historical structures.

Factor 6, Personal Contacts -- Level 6-3 -- 60 Points

Contacts are with the general public, owners of properties, varied business and industrial managers, local officials, and colleagues involved in the preservation and rehabilitation of the cultural environment.

(PAGE 66 10/86 TS-77)

Factor 7, Purpose of Contacts -- Level 7-3 -- 120 Points

Contacts are made to ensure accuracy and orderly administration of rehabilitation projects; to publicize work accomplishments within the historical and preservation communities; to garner the cooperation and assistance of project cosponsors and property owners; and to educate the public through explanation of the objectives and work procedures involved in rehabilitation projects.

Factor 8, Physical Demands -- Level 8-1 -- 5 Points

Work is mostly sedentary but there is some walking, climbing, and bending during visits to the site of an historical structure.

Factor 9, Work Environment -- Level 9-1 -- 5 Points

Most work is performed in an office setting although there is occasional exposure to adverse conditions at the site of a structure proposed for rehabilitation.

TOTAL POINTS -- 2790

PAGE 67 10/86 TS-77

ARCHITECT GS-0808-12, BMK #3*Duties*

Serves as an architect on the staff of a design and construction organization responsible for the planning, design, and construction of new and/or extension, conversion, or modernization of existing buildings or facilities. Assignments involve (a) performance of office and field architectural duties associated with architectural/ engineering review, inhouse design, and/or monitoring and managing construction projects; and (b) building or project sites with diverse climatic, geographic, and environmental conditions. Applies the latest design and construction techniques to such structures as office buildings, parking facilities, courtyards, customs houses, warehouses, historical buildings, courthouses, and border stations.

- Performs professional review, assessment, and guidance through the comparative analyses of design development documents, including the resolution of complex design problems, as well as the preparation of appropriate documents for agency officials, client agencies, and contract A/E firms.
 - Conducts, or directs the conduct of, investigations of project site to determine (for new construction) feasibility of proposed project; topography; and essential site configuration; or (for additions or renovations) condition of structure and essential data prior to initiating design. Evaluates data obtained, incorporating relevant features into design consideration and solutions.
 - Meets with local community organizations to ensure that designs complement the local area and to assess the effects of new or additional construction on the local employment market.
 - Prepares detailed fee estimates used for negotiating with architect-engineering firms for design services; and all pertinent correspondence, plans, reports, and A/E contract criteria necessary for project completion.
- PAGE 68 10/86 TS-77
- Reviews, evaluates, and determines adequacy of shop drawings, samples, certificates of compliance, laboratory analyses, paint certifications, and other submittals and data from contractors covered by Government contracts. Determines compliance or noncompliance for such submittals.

- Meets with contractors, manufacturers' representatives, and Government agency representatives to establish materials and test requirements. Reviews contractors' reports to determine adequacy of design. Assists in administering A/E contracts.
 - Evaluates technical data pertaining to materials, equipment, shop drawings, proposals for modifications and additions, and methods of installation submitted by contractors. Reviews for technical feasibility, adequacy, and compliance with specifications. Determines if materials and equipment meet contract requirements, and recommends approval or rejection of all or parts of the submissions and proposals. Confers with contractors to resolve any problems or conditions.
 - Evaluates design and construction objectives, identifies most economical and efficient procedures for building renovation, design, and construction, including inhouse design, coordinating with other architects and/or engineers in coverage of all technical areas, resolving overlapping responsibilities among technical disciplines concerning attention to design, and meeting total building objectives and schedules; and preparing all drawings, specifications, and supporting documents necessary for advertised or negotiated procurement.
 - Participates in A/E evaluation and selection process. Evaluates and/or recommends the work of architect-engineer firms to ensure design excellence and compliance with all regulations and design criteria.
 - Assists in administering construction projects, and makes recommendations to contract officers concerning contract modification. Participates in cost estimating.
 - Prepares statement of architectural scope of work and detailed supplementary instructions for design guidance and instructions of consulting engineers and architects retained to develop working drawings and specifications.
- PAGE 69 10/86 TS-77
- Outlines in detail those architectural and economic factors to be presented to contract A/E firms to facilitate design decisions on major systems from a range of possible alternatives.

Factor 1, Knowledge Required by the Position -- Level 1-7 -- 1250 Points

- Knowledge of professional architectural concepts, principles, and practices applicable to the full range of duties concerned with the planning, design, renovation, and construction of such structures as office buildings, warehouses, parking facilities, historic buildings, customs and court facilities, and border stations.
- Knowledge and skills sufficient to design, inspect, or supervise the construction of such buildings.

- Knowledge of related fields of activity or disciplines (i.e., electrical, mechanical, civil, and structural engineering) to ensure that areas of overlapping responsibilities among technical disciplines receive proper design consideration and that total project objectives are met.

Factor 2, Supervisory controls -- Level 2-4 -- 450 Points

The supervisor gives assignments in general terms, indicating priorities and overall objectives. The architect is expected to plan and carry out the work independently, coordinate with others as required, and resolve problems as they occur. Work is reviewed for adequacy of results and compliance with basic objectives.

Factor 3, Guidelines -- Level 3-4 -- 450 Points

Guidelines include agency design and construction standards, architectural and related standards, established procedures and policy statements. These guidelines are often inadequate in dealing with the more complex assignments, and they seldom provide concrete solutions to specific problems. The employee must use experienced judgment and initiative in applying and adapting architectural principles and practices where significant departures from established practices and precedents are required, resulting from such factors as unusual local conditions, increased emphasis on energy conservation, deficient design drawings, significant modifications to existing architectural fabric of a building, or outdated design criteria.

PAGE 70 10/86 TS-77

Factor 4, Complexity -- Level 4-5 -- 325 Points

Assignments involve planning, design, and construction of new buildings; and/or extension, restoration, modernization, or renovation of existing buildings. These diverse assignments encompass the full range of architectural problems common to structures such as office buildings, warehouses, parking facilities, border stations, and court and customs facilities. The architect exercises experienced judgment in adapting traditional techniques or evolving new ones to solve complex architectural problems. Issues encountered usually fall within the state-of-the-art but generally involve a combination of many and varied complex features in most assignments. Recognizes the relationship of problems and practices of related disciplines either toward solving engineering and related problems or determining the most appropriate source for expertise and assistance. Applies the latest technological advances relating to the design and construction of new, or the renovation and restoration of existing, buildings. Considers the logistics of working in occupied space, and maintains a satisfactory environment for the occupants of such space.

Factor 5, Scope and Effect -- Level 5-3 -- 150 Points

The purpose of the position is to provide a specialist to plan, design, organize, control, coordinate, and/or review and approve the actions inherent in the renovation, restoration, design, and construction of public buildings. The architect reviews and evaluates all aspects of the design phase, so that unnecessary delays and increased costs can be prevented. The architect's actions affect the work of other subject matter specialists within private A/E firms and impact on matters

relating to safety, methods, materials, progress, and costs. The working drawings developed by A/E firms are reviewed and implemented.

PAGE 71 10/86 TS-77

Factor 6, Personal Contacts -- Level 6-3 -- 60 Points

Contacts are made with architects and engineers within the employing organization, project managers, representatives of architect-engineer firms, client agencies, local and State governments, local community organizations, code producing organizations, manufacturers and material suppliers, construction contractors, and members of professional and technical societies.

Factor 7 Purpose of Contacts -- Level 7-3 -- 120 Points

Contacts are made to conduct surveys and investigations; assess the effects of construction on the local community; resolve specific design or construction problems; develop factual data to base recommendations and decisions on issues where there may be conflicting interests and opinions; justify feasibility and desirability of modifying existing rather than constructing new buildings; and/or motivate field technical personnel toward safe and continued use of good architectural practices.

Factor 8, Physical Demands -- Level 8-2 -- 20 Points

The work is sedentary except for regular and recurring field surveys and construction site inspections. Such inspections involve a considerable amount of physical activity, including walking, climbing, bending, and stooping.

Factor 9, Work Environment -- Level 9-2 -- 20 Points

Most work is performed in an office setting although there are regular and recurring visits to building site locations during the construction supervision of design projects. Such visits expose the architect to a variety of hazards associated with construction activities, including high noise levels, dust, moving equipment, chemicals, etc.

TOTAL POINTS -- 2845

PAGE 72 10/86 TS-77

ARCHITECT GS-0808-13, BMK #1

Duties

Serves as one of several architects on the staff of an agency with overall responsibility for the technical and business management of designated major building projects from the preliminary planning stage through the design, construction, equipment installation, and check-out stages.

Assignments: (a) encompass functional tasks such as planning, organizing, controlling, coordinating, reviewing, and approving design and construction work performed by others; (b) embrace a multimillion dollar project such as an industrial, commercial, institutional, or public building which typically requires a span of four years or more to complete and entails special problems requiring unusual treatment; (c) involve broad directive authority over the planning, control, and use of resources and efforts of agency and contractor organizations; and (d) entail contracting officer authority for execution and administration of personal and professional services contracts. Performs the following typical tasks:

- Participates with key agency personnel and those of a client agency who are responsible for defining the goals of a project, working with them to prepare a master plan for accomplishing such goals.
 - Prepares architectural and support cost estimates to achieve the goals of the master plan.
 - Prepares schedules for complete project, implementing a system for review, control, and reporting on project status.
 - Determines which phases of the project will be performed inhouse or by contract.
 - Negotiates contract specifications and design changes with organizational elements of the agency and contractors.
 - Participates in review of bids, contractors' proposals, contract specifications and designs, as well as contract negotiations and technical and business discussions with contractors.
- PAGE 73 10/86 TS-77
- Monitors and assesses effectiveness of contractors in meeting contractual requirements, technical and administrative.
 - Monitors project reviews, readjusting money, schedules, and work for completing project.
 - Resolves problems or conflicts impeding progress, assuring that contractor and agency staffs work effectively toward timely completion of project.

Factor 1, Knowledge Required by the Position -- Level 1-8 -- 1550 Points

- Mastery of architectural concepts, principles, and practices sufficient to permit the architect to serve as the technical and business manager of designated major building projects from the preliminary planning stage through the design, construction, and equipment installation stages to the check-out stage or point of occupancy.
- Knowledge and skill sufficient to apply the latest developments in building design and construction in solving problems not readily treated by accepted methods.

- Knowledge of related fields of endeavor such as mechanical and electrical engineering and landscape architecture.
- Knowledge of and skill in applying concepts and procedures inherent in or associated with project management, financial management, and procurement to achieve project goals and objectives.

Factor 2, Supervisory Controls -- Level 2-4 -- 450 Points

Assignments are made in the form of a designated project for which the scope, target completion date, and available funds have been defined. The architect plans for and carries out (largely through the efforts of others) projects independently with authority to act on own initiative on matters affecting the project. Master plans, deviation from agency policies, schedule changes (if specified), and changes or actions that degrade the objective performance or alter operational characteristics of the project are submitted for prior review and approval by the supervisor together with recommended courses of action, including available alternatives. The architect keeps the supervisor informed of progress, potentially controversial matters, or issues with far-reaching implications. Completed work is reviewed from an overall standpoint in terms of effectiveness in meeting requirements. The supervisor is available for consultation on policy matters which may affect the agency.

PAGE 74 10/86 TS-77

Factor 3, Guidelines -- Level 3-4 -- 450 Points

Guidelines include broadly stated agency regulations and policy and such standard material as technical manuals and literature, textbooks, agency planning criteria, and established practices. While helpful and pertinent to assignments, the guidelines embrace a range of administrative and technical criteria involving concepts and principles for which the architect must either adapt, extend, or develop supplementary material due, for example, to environmental or ecological conditions or individual characteristics of different locations or types of buildings.

Factor 4, Complexity -- Level 4-5 -- 325 Points

Assignments involve overall responsibility for the technical and business management of designated major building projects required by the employing agency or other Federal agencies. Designated projects typically involve difficult or unusual negotiations or coordinations concerning technical, socioeconomic, administrative, or other aspects, e.g., compromises between a theoretically ideal method and a more economical but technically less satisfactory one; unfavorable local conditions that preclude use of standard methods or practices; economic, social, or ecological benefits that could be derived as compared with estimated costs involved; public interest or urgency compared with Federal, State, local, or economic restraints; and conflicting interests and opinions between the employing agency and the client agency, the agency and State government or their consultants, or a State and its local governments and citizenry. The architect's actions constitute initial and, in many instances, the final agency recommendation or

decision concerning the technical adequacy and cost effectiveness of the building's design and construction.

PAGE 75 10/86 TS-77

Factor 5, Scope and Effect -- Level 5-5 -- 325 Points

The purpose of the position is to provide an expert to plan for, organize, control, coordinate, review, and approve the actions inherent in the design and construction of such designated structures as industrial, commercial, institutional, or public buildings. Such structures constitute major projects of the agency's nationwide building construction program. The architect anticipates and initiates action on administrative, technical, and socio-economic problems which are considered critical, i.e., if they are not identified in their early stages, they are likely to lead to serious consequences in the form of unnecessary delays and increased costs. The architect's actions affect the work of other subject matter specialists within and outside the agency and impact on matters relating to safety, methods, materials, progress, and costs.

Factor 6, Personal Contacts -- Level 6-3 -- 60 Points

Personal contacts are made with architectural and engineering personnel and other subject matter specialists from agency headquarters and regional offices and private industry such as architect-engineer firms and construction contractors, and key officials and professionals of client agencies.

Factor 7, Purpose of Contacts -- Level 7-3 -- 120 Points

The purpose of contacts is to plan, direct, and control actions of others involved or to be involved in any one or more aspects of a designated project. The work requires an active and leading role in conferences, meetings, and negotiations on problems and issues of considerable consequence or importance involving varying viewpoints, goals, and objectives.

PAGE 76 10/86 TS-77

Factor 8, Physical Demands -- Level 8-1 -- 5 Points

The work is primarily sedentary, although there may be some walking or bending involved during construction site visits.

Factor 9, Work Environment -- Level 9-1 -- 5 Points

The work is usually performed in an office setting except for occasional travel to attend meetings and conferences or conduct onsite inspections.

TOTAL POINTS -- 3290

PAGE 77 10/86 TS-77

ARCHITECT GS-0808-13, BMK #2*Duties*

Serves as one of several architects on the staff of an agency with responsibility for the development of architectural guide specifications for the design and construction of new or the rehabilitation of existing structures such as laboratories, prisons and general-purpose office buildings. Assignments involve the development of specifications and design criteria that are mandatory for use by ten regional offices geographically dispersed throughout the Nation. Responsibility also includes the provision of consultative advice to the regional offices as well as architect-engineer and contractor firms.

- Determines need for new or revised specifications and criteria as a result of reading technical literature, reviewing field investigation reports, and proposed plans and specifications and discussions with regional offices of the agency, architect-engineering firms, construction or equipment contractors, other professional architects or engineers and subject matter officials of agency headquarters and regional offices.
 - Confers with regional offices and operating elements of the headquarters on feasibility of modifying existing criteria or making use of new developments; coordinates design or other features with other departments or agencies for possible governmentwide application.
 - Identifies requirements (e.g., design criteria, scope of work extent and scope of drawings, and order of preparation) for new or revised specifications to be developed inhouse or by architect-engineer firms.
 - Develops specifications or attends meetings, prior to negotiation of contracts, with prospective contractor to answer questions about architectural features, schedules or procedures policies, and criteria for subsequent inclusion in contract.
 - Answers architect-engineer inquiries during progress of contract, on interpretation of agency manuals or guide specifications, schedules, procedures, policies, or technical problems.
- PAGE 78 10/86 TS-77
- Recommends appropriate action on specifications proposed by other departments or agencies for governmentwide application, coordinating with regional offices and elements of the headquarters to obtain their technical viewpoints.
 - Answers inquiries from regional offices and architect-engineers on interpretation of guide specifications and architectural manuals, requested revisions or waivers to guide specifications, revisions to standard drawings or other technical matters concerning drawings or specifications proposed by regional architects for individual projects.

- Identifies need for and initiates appropriate guidance to regions pending publication of new or revised specifications.
- Confers with representatives of industrial organizations on new materials, processes, or procedures applicable to the design or construction of buildings to keep current with the state-of-the-art.
- Visits regional offices to determine adequacy of current criteria on projects under construction and to ascertain their degree of compliance with existing standards and guides.

Factor 1, Knowledge Required by the Position -- Level 1-8 -- 1550 Points

- Mastery of concepts, principles, and practices of architecture that enables the architect to serve as a technical authority in the development of agency guide specifications and design criteria for laboratories, prisons, and general purpose office buildings used by a number of different agencies or departments nationwide.
- Knowledge and skill sufficient to evaluate and incorporate the latest developments in the field into technical guidelines which, as a minimum, are mandatory for use within the agency's regional offices.
- Knowledge of related engineering fields such as mechanical and electrical.

PAGE 79 10/86 TS-77

Factor 2, Supervisory Controls -- Level 2-4 -- 450 Points

The supervisor assigns work in terms of overall objectives together with areas of special interest and urgent concern. The architect is expected to carry out assignments, give advice, and take actions independently. The architect, at own discretion, keeps supervisor informed as to progress of work, unusual difficulties encountered, and problems requiring deviation from current policy. Completed work is evaluated in terms of effectiveness of the architectural guidance afforded others and conformance to policy.

Factor 3, Guidelines -- Level 3-4 -- 450 Points

Guidelines include agency regulations and policy statements in addition to existing guide specifications, design criteria, and architectural manuals. The architect exercises judgment in determining the need for new or revised specifications and criteria. While helpful and pertinent to standard practices, the guidelines embrace a range of technical criteria involving concepts and principles which the architect must adapt or extend to achieve new or revised guidelines or when recommending waivers to existing guidelines.

Factor 4, Complexity -- Level 4-5 -- 325 Points

Assignments involve varied buildings at geographically dispersed locations, nationwide. Primary responsibility is the development of technical guidelines for use by regional offices of the agency as well as architect-engineers and contractors involved in design and new construction or rehabilitation work. The architect exercises ingenuity and resourcefulness in prescribing uniform practices, with or without alternatives, for varied geographical areas characterized by different problems.

Factor 5, Scope and Effect -- Level 5-5 -- 325 Points

The purpose of the position is to provide a technical authority on the design, construction, and rehabilitation of specific types of buildings who can develop guide specifications, design criteria, and architectural manuals for use by subject matter specialists within the headquarters and regions of the agency as well as by architect-engineer and contractor firms. The architect also provides advice and technical assistance in their development, use, and interpretation. The work performed affects the work of architects and engineers within the agency nationwide, and in some cases, affects the work of architects and engineers of other agencies and departments as well as private industry.

PAGE 80 10/86 TS-77

Factor 6, Personal Contacts -- Level 6-3 -- 60 Points

Personal contacts are with subject matter specialists within the agency headquarters and regional offices and professionals of other agencies and departments, architect-engineering firms, and construction contractors.

Factor 7, Purpose of Contacts -- Level 7-3 -- 120 Points

The purpose of contacts is to advise on the development, use, and interpretation of architectural guide specifications and design criteria, including exemptions and waivers from existing guidelines. The architect also coordinates standards and guides with other departments and agencies. These contacts generally require the employee to persuade or influence other subject matter experts to adopt or not to adopt technical issues.

Factor 8, Physical Demands -- Level 8-1 -- 5 Points

The work is sedentary in nature.

Factor 9, Work Environment -- Level 9-1 -- 5 Points

The work is performed primarily in an office environment but does involve occasional travel to regional offices, meetings with technical associations, or construction sites.

TOTAL POINTS -- 3290

PAGE 81 10/86 TS-77

ARCHITECT GS-0808-13, BMK #3

Duties

Serves as an architect in one of four regional divisions of an agency construction organization and is responsible for the guidance and coordination of various disciplines in design development of an architectural plan from conception through completion for large, complex medical school and hospital centers and related buildings and for complex renovation of existing medical facilities. Workloads normally include: (a) as many as 6 to 10 projects at different stages of design at any one time, and (b) facilities such as a multiple-storied medical school-hospital complexes with features such as interstitial systems integration and innovative energy conservation systems. Projects routinely attract public and congressional attention and require continual adjustment due to factors such as inflation, available supplies and resources, federal budget pressures and technological advances in the state-of-the-art during the several years of design and construction processes.

- Surveys site or physical features of building for additions and alterations to verify requirements and check construction details. Evaluates project scope and direction and develops project requirements and conceptual studies to firm up scope and to provide guidance to maintenance and operations personnel.
 - Develops alternative concepts and complete preliminary and working drawings for agency-designed projects incorporating the latest technological advances for quality and economy of design, considering fund limitations, operational requirements, and site, climate, and special conditions.
 - Reviews and analyzes submissions of concepts, preliminary and working drawings prepared by contracted architect/ engineers for compliance with agency standards, policies and goals at regular stages of completion, providing guidance to architect/engineers on scope and concept or special features, and identifying and recommending correction of planning and functional errors or improvement of architectural features; coordinating any A/E changes with other agency elements and resolving discrepancies in opinions or submissions which affect agency elements or outside firms, other government agencies or other interested parties.
- PAGE 82 10/86 TS-77
- Serves as the agency's architectural expert in master planning medical facilities and in design research for developing: (a) improved approaches to planning problems, (b) intensive studies of flow patterns within and between the various services functioning in the hospital and on the site, and (c) unique solutions for critical design areas.

- Prepares estimates of number of hours required to accomplish architectural portion of plan used for A/E contract negotiations or changes, and may serve as a member of the A/E Evaluation Board.
- Serves as architectural expert in final inspections to assure conformance to contract documents.
- Keeps current with the latest developments in architecture and related disciplines by review of technical literature, attending conferences or professional society meetings, and discussion with industry representatives. Evaluates new materials and design or construction processes and techniques, recommending the adoption of those that would provide more efficiency or economy and to keep up with changing requirements.
- Provides architectural expertise to all agency field stations requesting assistance in solution of problems during process of design and construction of medical facilities or in relation to projects decentralized to the facility for accomplishment.

Factor 1, Knowledge Required by the Position -- Level 1-8 -- 1550 Points

- Mastery of concepts, principles, and practices of architecture and of hospital planning that enables the employee to serve as an authority in the development of concepts and preliminary and working drawings for the design and construction of very large and complex medical facilities, costing several hundreds of millions of dollars and requiring as many as 5 to 7 years in design and construction.
- PAGE 83 10/86 TS-77
- Knowledge and skill sufficient to conceptualize and develop new approaches to the latest problems in the design and construction of medical facilities, and to evaluate and review concepts, preliminary plans, and working drawings made by contract A/E firms.
 - Knowledge and skill sufficient to provide staff advisory, consulting, and reviewing services within and outside the agency and to recommend unique solutions to problems stemming from a wide variety of sources.
 - Knowledge of construction techniques and technology, hospital functions and requirements and their effect on design and cost of facilities.

Factor 2, Supervisory Controls -- Level 2-4 -- 450 Points

The supervisor makes assignments, establishing the overall objectives, priorities, and deadlines in consultation with the employee. The architect carries out projects independently, resolving most conflicts that arise, and coordinating the work with others as required. Methods used and approaches taken in problem-solving are typically determined by the architect. Work in progress may be reviewed for the purpose of coordinating and adjusting work schedules; however,

completed work is reviewed only for general conformance to scope and objectives and any policy considerations rather than technical adequacy.

Factor 3, Guidelines -- Level 3-4 -- 450 Points

Guidelines include Federal and agency policies and regulations, standard textbooks, technical handbooks and manuals, standard designs and specifications, precedents in the form of prior projects, established practices and applicable codes and regulations that generally vary from one location to another. While helpful and pertinent to assignments, the guidelines include a range of administrative and technical criteria involving concepts and principles from which the architect must adapt, extend, or develop supplementary material due, for example, to functional requirements, environmental or ecological conditions, or individual characteristics of different locations or types of structures.

PAGE 84 10/86 TS-77

Factor 4 Complexity -- Level 4-5 -- 325 Points

The assignments involve development of concepts, preliminary and working drawings and the review of contract A/E drawings for the design and construction of many diverse types of projects at 172 medical centers, 107 national cemeteries, 236 outpatient clinics or 58 regional offices nationwide.

Typically, projects range in complexity from a cemetery administration structure to medical complexes requiring numerous buildings to house not only patient beds, but research facilities, nursing homes, domiciliaries, medical schools, and laboratories. Designated projects typically involve many and varied complex features concerning technical, administrative, and other aspects, e.g., compromises between theoretically ideal methods and more economical, but technically less satisfactory methods, unfavorable local conditions or peculiar user requirements that preclude use of standard methods or practices; economic constraints and urgency involving compressed time schedules; and conflicting interests and opinions between the agency medical staff, the target groups for =medical service, private A/E firms, State and municipal governments, universities and Federal and legislative employees and officials. The architect's actions constitute initial and, in many instances, the final agency recommendation or decision concerning the technical adequacy and cost effectiveness of the building's design and construction.

Factor 5, Scope and Effect -- Level 5-5 -- 325 Points

The purpose of the work is to design and coordinate complex medical facility construction involving unique problems that require new approaches and methods for solution that will involve changes in architectural standards and specifications, focus and planning agencywide. The employee serves as a consultant to other agency professionals, agency officials, station employees and private A/E firms over the life of the project, providing expert advice and guidance over a broad range of architectural activities. Results of the efforts affect the work of other architectural experts both within and outside the agency or the development of major aspects of agency construction programs.

Factor 6, Personal Contacts -- Level 6-3 -- 60 Points

Personal contacts include a variety of officials, managers, professionals, or executives of the agency, other agencies and outside organizations. Typical of these contacts are contractor or manufacturer representatives; representatives of private A/E firms; other professionals or para-professionals engaged in or concerned with the design of the cultural and social environment, e.g., planners, designers, special interest groups, university officials, environmentalists and government officials at all levels.

Factor 7, Purpose of Contracts -- Level 7-3 -- 120 Points

Purpose of contacts is to influence or persuade other architects, subject matter specialists, government officials, hospital directors, university groups, environmentalists, etc., to adopt technical points, methods and procedures about which there are conflicts, to negotiate agreements within the agency or with other agencies and contractors where there are conflicting interests and opinions among organizations or among individuals who are also experts in the field, or to justify the feasibility and desirability of work proposals to top agency officials.

Factor 8, Physical Demands -- Level 8-2 -- 20 Points

The work requires regular and recurring field and construction inspections, investigations, or surveys in which there is a considerable amount of walking, stooping, bending, and climbing.

Factor 9, Work Environment -- Level 9-2 -- 20 Points

There is regular and recurring exposure to moderate discomforts and unpleasantness such as high noise levels, high or low temperatures, or adverse weather conditions.

TOTAL POINTS -- 3320

ARCHITECT GS-0808-13, BMK #4*Duties*

Serves as a senior architectural consultant for a design and construction organization with responsibility for: (1) providing expert technical advice on the overall planning and programming requirements for the design and construction of new buildings or the repair and alteration of existing facilities (i.e., office buildings, warehouses, border stations, parking facilities, historic buildings, and court and customs facilities); (2) performing architectural studies and comparative

design analyses recommending solutions of problems in designated structures to be included in the current repair and alteration program and/or the agency's construction program to be submitted to Congress; (3) professional review, technical evaluation, assessment, and recommendation through the comparative analysis of progressive design and construction documents, including: (a) the resolution of complex design and/or construction problems, and (b) providing the appropriate design direction to agency officials, client agencies, and contract A/E firms, or appropriate construction direction to the contracting officer and construction contractors; and (4) establishing the architectural design, and coordinating the preparation of complete design documents.

- Provides highly technical and professional architectural assistance to top management, regional officials, other architects within the agency, other Government agencies, and contract A/E firms. A high degree of innovation, creativity, imagination, resourcefulness, and technical judgment concerning design, construction, and contractual problems is required because situations encountered are frequently without precedent.
- Is responsible for the quality control of the architectural elements of inhouse and A/E design projects.
- Keeps current with the latest developments in architecture and related disciplines by reviewing technical publications, attending technical conferences or professional society meetings, and discussions with industry representatives. Evaluates new materials and design or construction processes and techniques; recommends adoption of those that would improve efficiency.

PAGE 88 10/86 TS-77

- Attends meetings prior to A/E contract negotiation with prospective A/E contractors to establish project schedules, agency procedures and policies, and technical criteria for subsequent inclusion in the A/E contract. Prepares criteria for A/E contracts.
- Identifies requirements (i.e., design criteria, scope of work, extent and scope of drawings, order of preparation) for new or revised guide specifications to be developed by architect-engineer firms or inhouse personnel.
- Serves on site selection teams which recommend selection of sites for new construction. Is responsible for the investigation of topography, soil conditions, utility services and other features of the site which may influence the selection recommendation. Participates in A/E evaluation and selection process.
- Responds to requests from organizational elements of the agency and congressional subcommittees for technical information.
- Provides expert professional and technical advice to other architects and engineers on complex projects involving unusual and unique problems.

- Assists in administering construction projects, and makes recommendations to contract officers concerning contract modification. Participates in cost estimating.
- Conducts periodic seminars for other design and construction architects and specialists in other disciplines as appropriate, to acquaint them with new materials and design, or new construction processes and techniques.
- After completed building has been occupied for an appropriate period, visits project site locations with other organizational personnel to observe whether or not completed project serves intended functions and obtains information for use in future design instruction or reviews.

PAGE 89 10/86 TS-77

Factor 1, Knowledge Required by the Position -- Level 1-8 -- 1550 Points

- Mastery of concepts, principles, and practices of architectural design sufficient to enable the architect to serve as an expert in developing specifications and design criteria for major projects, make surveys and studies, and develop special reports and briefings for high agency officials, covering the preliminary planning stage through project completion.
- Knowledge and skills sufficient to evaluate and incorporate the latest developments in the field of architecture into technical requirements and to serve as an expert technical advisor to other architects and engineers on complex architectural problems.
- Knowledge of architectural practices and techniques related to the renovation, restoration and adaptive re-use of existing buildings as well as the design and construction of new buildings.
- Knowledge of related disciplines such as landscape architecture, mechanical, electrical, civil and structural engineering.

Factor 2, Supervisory Controls -- Level 2-4 -- 450 Points

The supervisor assigns work in terms of overall objectives together with areas of special interest and primary concern. The architect carries out assignments, gives advice, and takes action independently. The architect, at own discretion, keeps supervisor informed as to progress of work, unusual difficulties encountered and problems requiring deviation from current policy. Completed work is evaluated in terms of effectiveness.

PAGE 90 10/86 TS-77

Factor 3, Guidelines -- Level 3-4 -- 450 Points

Guidelines include agency policies and regulations, textbooks and manuals, standard designs and specifications, established practices, and applicable building codes and ordinances that generally vary from one state to another. While helpful and pertinent to individual assignments, the guidelines embrace many complex concepts and principles for which the architect must either adapt, modify, extend, or develop supplementary material due to environmental conditions or

individual characteristics of different site locations or structure types. The architect employs judgment to recommend revisions to specifications, criteria, and guidelines.

Factor 4, Complexity -- Level 4-5 -- 325 Points

Assignments involve the design and construction of new, or the repair, alteration, or restoration of existing, facilities such as office buildings, parking facilities, warehouses, border stations, and court and customs facilities. This often involves the logistics of working in occupied space, and maintaining a satisfactory environment for the occupants. Individual assignments involve a number of complex features that generally vary from one project to another in scope or magnitude and require the architect to use different approaches. Reviews the work of other architects and A/E firms that contain a variety of complex features.

Factor 5, Scope and Effect -- Level 5-4 -- 225 Points

The purpose of this position is to provide an expert in the field of architecture to furnish technical advice and assistance in the development of studies, plans and design criteria for planning and preliminary and final design of structures such as office buildings, warehouses, parking facilities, border stations, historic buildings, and court and customs facilities which have been proposed or approved for construction repairs and alterations. The architect's actions affect the work of other architects and engineers within the agency and private architect-engineer firms and impact on matters relating to renovations, design and construction methods, materials, progress, costs and other features.

PAGE 91 10/86 TS-77

Factor 6, Personal Contacts -- Level 6-3 -- 60 Points

Personal contacts are made with architectural and engineering personnel and other subject matter specialists of the agency's regional design and construction office and its national headquarters office, private architectural-engineering firms, other Government agencies, material and/or equipment manufacturers, and key officials and other subject matter specialists within the agency.

Factor 7, Purpose of Contacts -- Level 7-3 -- 120 Points

The purpose of these contacts is to provide technical assistance; participate in interchange of ideas with peers; and plan, direct, and control the actions of others involved or to be involved in the design and construction or repair and alteration of designated projects in Government-owned and leased buildings. The work involves an active and leading role in conferences and meetings on problems and issues of considerable consequence and importance involving varying viewpoints, goals and objectives.

Factor 8, Physical Demands -- Level 8-1 -- 5 Points

The work is primarily sedentary although there may be some walking or bending involved during construction site visits.

Factor 9, Work Environment -- Level 9-1 -- 5 Points

Work is usually performed in an office setting except for occasional travel to attend meetings and conferences or conduct onsite inspections.

TOTAL POINTS -- 3190

PAGE 92 10/86 TS-77

ARCHITECT GS-0808-14, BMK #1*Duties*

Serves as a technical authority on the staff of a major command of a military department with responsibility for advising on the technological and economic feasibility of processes, systems, and equipment utilized in the design and construction of new-generation hospitals and related structures, including medical and dental clinics. Assignments embrace analytical studies (some of which may border on the state-of-the-art) accomplished by others either inhouse or under contract to derive new functional designs that will eliminate or minimize architectural and medical problems associated with and encountered in existing facilities. The architect also advises field-level divisions of the command on the development of concept and working drawings for the design and construction of hospitals identified as major medical facilities in terms of their individual scope and magnitude, i.e., multimillion dollar projects requiring a number of years to design and construct.

- Conceives and recommends studies to resolve problems unique to medical facilities.
- Coordinates technical elements of the command's medical facility design and construction program with related activities of other Government agencies and departments, promoting mutual cooperation in areas which can be combined for more effective results.
- Writes papers and reports to state the command's position and to further the objectives of the command's medical facility design and construction program; publishes those containing knowledge of interest for use by others engaged in or concerned with the design and construction of medical facilities.
- Confers with other architects, management officials, and subject matter specialists (including medical doctors and engineers) about numerous and varied matters concerning the use as well as the design and construction of medical facilities, representing the command and the department at technical symposia and conferences.

PAGE 93 10/86 TS-77

- Monitors technical aspects of contracts and inhouse efforts pertinent to the command's medical facility design and construction program to ensure successful completion; recommends changes in program directions, solutions to problems or redirection of effort as required.
- Reviews reports and papers from the command's staff and contractors to ensure technical accuracy and compliance with objectives, policies, and guidelines of the command and higher headquarters.
- Leads predesign and other conferences and meetings with field-level divisions and architect-engineer and construction firms to define functional requirements, advise on design criteria and guide specifications, and resolve technical errors associated with or resulting from the development of concept and working drawings for major medical facilities.
- Keeps current with the latest developments in architecture, related disciplines, and the medical profession by reviewing technical literature, attending conferences or professional society meetings, and discussions with industry representatives. Evaluates new materials and equipment and design or construction processes and techniques, recommending the adoption of those that would improve efficiency or economy.

Factor 1, Knowledge Required by the Position -- Level 1-8 -- 1550 Points

- Mastery of advanced principles and practices of architecture that enables the employee to investigate and provide consultative services on the entire range of systems, processes, and components inherent in the design and construction of new-generation hospitals and related structures, including medical and dental clinics.
- Familiarity with the architectural needs of the field of medicine and a working knowledge of related engineering disciplines such as civil, electrical, and mechanical.
- Knowledge and skill sufficient to evaluate and incorporate the latest developments in the design and construction of medical facilities into policy requirements or program objectives for use within the command.

PAGE 94 10/86 TS-77

Factor 2, Supervisory Controls -- Level 2-5 -- 650 Points

The supervisor provides guidance primarily in the form of general policy directives and staff, time, and budget constraints. The architect typically initiates new studies or activities independently. The architect is the principal advisor to the supervisor on the design and construction of hospitals and related structures. The architect keeps the supervisor informed of progress. Recommendations and decisions of the architect are generally accepted as technically authoritative even though final approval may depend upon formal action by the supervisor.

Completed work generally is reviewed for adherence to policy and for assurance that broad program objectives are fulfilled.

Factor 3, Guidelines -- Level 3-5 -- 650 Points

Guidelines consist of broadly stated command and departmental regulations and policy statements and, in addition, traditional architectural manuals and related publications. Since new-generation hospitals and related structures embrace many and varied systems, processes, and components (some of which border upon the state-of-the-art) the technical guidelines (while available) often have very limited applicability. The architect conceives new studies and exercises judgment and ingenuity in deviating from traditional methods or approaches that may be available and evolves new or different approaches as required. The architect is recognized as a technical authority in the interpretation of guidelines related to the design and construction of medical facilities.

PAGE 95 10/86 TS-77

Factor 4, Complexity -- Level 4-5 -- 325 Points

Assignments involve the full range of processes, systems, and components pertinent to the design and construction of hospitals and related structures. Traditional processes, systems, and components have proven to be less than satisfactory from functional, technical, and/or economic standpoints. Analytical studies conceived and initiated by the architect generally vary in terms of scope and magnitude but typically include some which border on the state-of-the-art as well as those which include a combination of many and varied complex features, either technical, socioeconomic, or administrative in nature, e.g., theoretically ideal methods versus those which are more economical but technically less satisfactory, sophisticated functional requirements that preclude use of traditional methods or practices, urgency and economic constraints coupled with compressed time schedules, and conflicting interests and opinions between or among ultimate facility users and other architects and specialists of other disciplines.

Factor 5, Scope and Effect -- Level 5-5 -- 325 Points

The primary purpose of the position is to provide an authority to advise other architects, subject matter specialists, and officials of the command on the technological and economic feasibility of processes, systems, and equipment for the design and construction of new-generation hospitals and related structures. The architect's recommendations and decisions concern highly complex problems involving many areas of uncertainty. The architect's actions concerning the need for new studies affect the command's medical facility design and construction program and the work of other architects and subject matter specialists both within and outside Government.

Factor 6, Personal Contacts -- Level 6-4 -- 110 Points

Personal contacts are made with architects, other subject matter specialists, and officials of command headquarters, field-level divisions, departmental and higher headquarters, other

departmental commands, and other agencies and departments. Contacts are also made with officials and professionals of architect-engineering firms, manufacturing and construction contractors, and professional societies. Represents command and department on interagency conferences and seminars and architectural councils and conferences.

PAGE 96 10/86 TS-77

Factor 7, Purpose of Contacts -- Level 7-4 -- 220 Points

The purpose of the contacts is to provide authoritative advice on the technological and economic feasibility of processes, systems, and equipment for the design and construction of new-generation hospitals and related structures and, in addition, to defend, justify, or settle controversial technical, socioeconomic, or administrative issues involving such facilities. Assignments also involve active participation in high-level conferences, negotiations, and meetings concerning matters about which there are conflicting interests and opinions. The architect influences or persuades other subject matter specialists (who are quite often experts in the field) to adopt technical approaches and concepts when conflicts are involved.

Factor 8, Physical Demands -- Level 8-1 -- 5 Points

The work is sedentary in nature.

Factor 9, Work Environment -- Level 9-1 -- 5 Points

Work is performed in an office setting with some travel to attend meetings, symposia, or conferences.

TOTAL POINTS -- 3840